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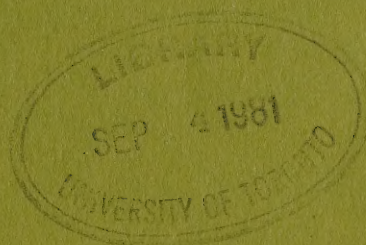
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1956-57 to 1974-75

A Statistical Description

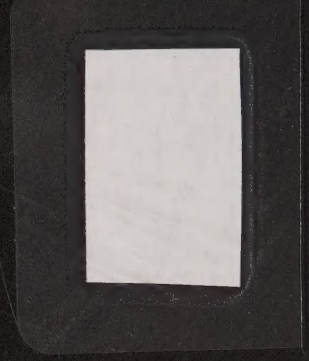
PART I



Prepared by:

Max von Zur-Muehlen
Institutional and Public
Finance Statistics Branch
Statistics Canada

April 15, 1977



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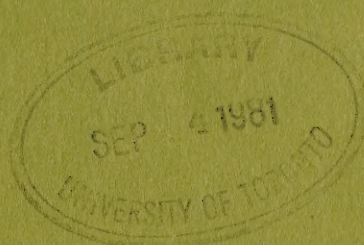


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Table of Contents

	<u>Page</u>
Preface	2
List of Tables	1

PART I

Introduction	5
The Growth Pattern of University Teachers by University and Province	6
The Growth Pattern of University Teachers by Eight Teaching Fields	13
The Percentage of Female University Teachers	19
Average Age of University Teachers	23
Academic Rank Distribution and Salary Structure of University Teachers	25
Doctoral Qualifications of University Teachers ...	29

Part II

The Growth Pattern of University Teachers By 47 Disciplines	32
Sex Distribution by Discipline	43
Age Distribution by Discipline	43
Academic Rank Distribution by Discipline	48
Salary Structure by Discipline	48
Doctoral Qualifications by Discipline	56

PREFACE

This report is Part I of a three-part series dealing with the characteristics of teachers at Canadian universities. It focuses on the growth pattern of full-time faculty by province, institution and discipline over a twenty-year period (1956-57 to 1975-76). This information is cross-tabulated with socio-economic characteristics such as sex, academic rank, age, salary and qualifications.

Part II of this series explores the previous employment of university teachers and makes United-States - Canadian comparisons. Part III addresses the issue of foreign teachers at Canadian universities.

The purpose of these three reports is to provide statistical series and to highlight some of the information. Since Canadian universities are now entering a period of limited growth, a review of the past 20 years is useful as it may give perspective to future trends. It also supplements some of the data that are published regularly by Statistics Canada.*

* The clerical assistance of Mrs. E. Kealey is gratefully acknowledged.

List of Tables

Part I

<u>Table</u>		<u>Page</u>
1	University Teachers by University and Province, 1956-57 to 1974-75	8
2	Percentage Distribution of University Teachers by University and Province, 1956-57 to 1974-75 ...	11
3	Index (1967-68 = 100) of University Teachers by Institution and Province, 1967-68 to 1974-75	14
4	University Teachers by Field, 1956-57 to 1974-75 .	15
5	Percentage Distribution of University Teachers by Field, 1956-57 to 1974-75	17
6	Growth Pattern of University Teachers Expressed as an Index (1967-68 = 100) by Field, 1956-57 to 1974-75	18
7	University Teachers by Field and Region, Selected Years	20
8	Percentage Distribution of University Teachers by Field and Region, Selected Years	21
9	Female University Teachers Expressed as a Percentage of the Total by Field, Selected Years	22
10	Average Age of University Teachers by Field, Selected Years	24
11	Percentage Distribution of University Teachers by Rank and Field, Selected Years	26
12	Average Salary of University Teachers by Field, Selected Years	28
13	Doctoral Qualifications of University Teachers by Field, 1956-57 to 1973-74	31

List of Tables

Part II

<u>Table</u>		<u>Page</u>
14	Full-Time University Teachers by Discipline, 1956-57 to 1974-75	36
15	Percentage Distribution of University Teachers by Discipline, 1956-57 to 1974-75	39
16	Growth Pattern (1967-68 = 100) of University Teachers by Discipline, 1956-57 to 1974-75	41
17	Female University Teachers Expressed as a Percentage of Total by Discipline and Region, Selected Years	44
18	Average Age of University Teachers by Region and Discipline, Selected Years	46
19	Percentage Distribution of University Teachers by Rank and Discipline, Selected Years.....	49
20	Average Salary of University Teachers by Discipline and Region, Selected Years	51
21	Salary Index (1970-71 = 100) of University Teachers by Discipline, 1956-57 to 1974-75	54
22	Doctoral Qualifications of University Teachers by Discipline and Region, Selected Years	57

Introduction

This report is a statistical overview of the characteristics of full-time university teachers during the last twenty years. Only since 1956-57 has Statistics Canada gathered information about them, such as sex, age, academic rank, doctoral qualifications and salary, on a regular basis, first biennially, and after 1966-67, annually.

Data in the first part of the report have been grouped into eight teaching fields, (education, fine and applied arts, humanities, social sciences, biological sciences, engineering and applied sciences, health professions, mathematics and physical sciences). The second part of the study discusses the same information for 47 selected disciplines such as English, psychology, chemistry and pharmacy. The major variables are numbers, percentage of females, average age, academic rank, doctoral qualifications and salary. This information is provided on a national level and for the four regions (Atlantic Provinces, Quebec, Ontario and Western Provinces) for selected years (with five-year intervals, 1958-59, 1963-64, 1968-69 and 1973-74).^{1.} The primary purpose of this report has been to provide historical series for the twenty-year period, 1956-57 to 1975-76.^{2.}

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1. The second report: "Profile of University Teachers in the Mid-Seventies - Selected Characteristics" deals with other variables such as citizenship and legal residence status and previous employment, particularly of those who were appointed during the early seventies, and the third report explores "The Issue of Foreign University Teachers at Canadian Universities".
 2. Data for 1975-76 were not yet available for most variables. There were 30,500 university teachers that year.

Part I

The Number of Teachers by University and Province

Table 1 gives the number of university teachers, by institution, between 1956-57 and 1974-75, grouped by province.^{3.}

The outstanding feature is the remarkable and unprecedented growth in numbers, particularly in the sixties and early seventies. The total in the 46 universities rose from 5,463 in 1959-60 to 28,444 in 1974-75, more than a five-fold increase. The 30 to 50 "other institutions" accounted, in 1959-60,

-
3. One difficulty in working with the university teacher file of Statistics Canada is that the number of institutions included varies, rendering year-to-year comparisons problematic. For this report, 46 universities were selected. Occasionally during the nineteen-year period a university did not report the number and characteristics of teachers for one or more years. In other instances, affiliated institutions were excluded. An attempt has been made to estimate the missing values in Table 1. Therefore, the data deviate slightly from the total number of teachers in other tables. Certain inconsistencies have remained where the reporting institutions have changed their definitions. For analytical purposes, the numbers should not be regarded as exact.

Some independent reporting institutions were earlier affiliated with a parent university, e.g., Calgary with Alberta and Regina with Saskatchewan. This explains the sudden shifts in numbers for one university in a particular year. Another unique feature of the university teacher file is inclusion of other post-secondary university-related institutions, especially those of religious nature. Three military colleges under federal auspices are also included. These institutions have been grouped into a residual category, "other institutions", but they represent only a few percent of the total number of teachers, and do not markedly affect the results of the study.

Only full-time teachers are included in this report; part-time faculty who probably have very different characteristics are excluded. It has been estimated that for many years, there were almost as many part-time as full-time faculty, teaching one or two courses as sessional lecturers, frequently in continuing education programs.

for only 463 teachers, many of them in the three military colleges. This group grew to 1,498 in 1974-75.⁴ For several years, particularly from the mid-sixties to early seventies, the number of teachers increased by more than 2,000 a year.

The greatest percentage increase occurred at Memorial University of Newfoundland, which had 63 teachers in 1959-60, and 747 in 1974-75. Many other institutions increased their numbers tenfold during these sixteen years. None of the institutions listed in Table 1 failed to at least double their academic staff.

The French-speaking universities underwent particularly rapid expansion, while most Ontario universities experienced a six- to tenfold increase in the number of teachers. It should also be remembered that six of the sixteen universities in Ontario were not in existence in 1959-60, and the staff at York, for example, grew from 12 to 1,056. Ontario universities had more than twice as many teachers in 1974-75 (11,078) as there were in all Canada 16 years before.

Expansion in the Western Provinces proceeded at a similar rate. The

4. The Ryerson Polytechnical Institute, with 637 teachers, is included for the first time.

Table 1
University Teachers by University and Province, 1956/57 - 1974/75

University	56/57	57/58*	58/59	59/60*	60/61	61/62*	62/63	63/64	64/65*	65/66	66/67*	67/68	68/69	69/70	70/71	71/72	72/73	73/74	74/75
Memorial	41	50	59	63	68	88	108	125	147	170	204	239	340	422	500	601	662	706	747
Prince Edward Island	10	12	14	17	20	21	23	24	28	33	65	98	119	120	123	125	129	122	117
Acadia	54	59	64	69	75	77	79	83	86	89	99	109	115	134	149	162	161	169	176
Dalhousie	89	97	105	105	104	129	154	179	202	226	278	330	391	422	492	572	622	625	699
Mount St. Vincent	18	20	22	23	25	25	25	26	28	31	40	50	55	56	52	62	69	75	80
N.S. Technological	25	26	27	28	30	31	32	39	44	49	52	55	63	68	70	69	64	67	65
St. Francis Xavier	78	79	80	84	89	97	106	121	120	119	134	150	158	170	192	230	228	205	205
St. Mary's	25	27	29	33	37	42	47	49	53	57	69	82	106	140	146	161	165	172	163
Sub-total Nova Scotia	289	308	327	342	360	401	443	497	533	571	672	776	888	990	1,101	1,256	1,309	1,313	1,388
Mount Allison	60	61	63	65	67	73	79	84	90	97	99	102	109	104	109	112	117	120	120
New Brunswick	83	90	97	111	125	138	152	171	193	216	256	296	330	373	387	418	447	500	516
Moncton	12	22	33	38	43	44	44	46	59	72	82	92	124	147	160	195	208	250	265
Sub-Total New Brunswick	155	173	193	214	235	255	275	301	342	385	437	490	563	624	656	725	772	870	901
Bishop's	17	19	21	24	27	29	31	37	44	52	59	67	73	79	81	90	70	73	75
McGill	433	440	448	472	497	556	615	668	731	795	878	962	1,091	1,168	1,178	1,138	1,155	1,245	1,260
Sir G. Williams	0	0	0	0	0	0	0	84	120	157	192	228	304	322	351	349	356	377	385
Montréal	269	273	277	298	320	334	349	447	538	630	803	977	1,067	1,168	1,212	1,372	1,405	1,427	1,484
Loyola	23	25	27	35	44	52	61	90	105	120	151	183	196	236	237	216	244	247	252
Québec	0	0	0	0	0	0	0	0	0	0	0	0	0	0	761	949	992	1,008	1,048
Laval	191	216	241	252	264	302	340	410	519	628	687	747	877	1,021	1,263	1,162	1,192	1,231	1,280
Sherbrooke	84	68	53	55	58	80	103	124	130	136	176	216	280	366	449	530	554	560	582
Sub-total Québec	1,017	1,041	1,067	1,136	1,210	1,353	1,499	1,860	2,187	2,518	2,946	3,380	3,888	4,360	5,532	5,806	5,968	6,168	6,366
Brock	0	0	0	0	0	0	0	0	0	25	51	77	92	123	152	186	198	203	219
Carleton	45	64	83	98	113	112	112	167	178	190	256	322	368	420	480	578	583	589	604
Queph	252	248	245	244	243	253	263	264	293	322	431	541	600	632	698	704	731	738	740
Lakehead	0	0	0	0	0	0	15	21	33	46	80	115	133	176	209	240	233	225	232
Laurentian	0	0	0	12	25	29	33	36	48	61	84	108	126	159	192	218	233	241	263

Table 1 (con't)

University Teachers by University and Province, 1956/57 - 1974/75

University	56/57	57/58*	58/59	59/60	60/61	61/62*	62/63	63/64	64/65*	65/66	66/67*	67/68	68/69	69/70	70/71	71/72	72/73	73/74	74/75
McMaster	103	102	102	114	126	148	171	195	244	293	329	365	389	436	477	675	711	747	771
Ottawa	162	180	198	212	226	240	254	291	294	297	352	408	467	591	653	835	877	886	901
Queen's	171	180	189	203	217	237	257	300	345	391	444	498	565	668	699	764	808	828	821
Toronto	998	888	778	860	942	1,008	1,073	1,125	1,251	1,376	1,616	1,856	2,054	2,165	2,340	2,379	2,423	2,420	2,471
OISE	0	0	0	0	0	0	0	0	0	0	0	101	131	137	144	133	134	136	139
Trent	0	0	0	0	0	0	0	0	0	39	59	79	101	113	120	157	160	172	175
Waterloo	0	0	0	0	65	91	117	160	230	301	377	454	471	563	649	728	714	729	741
Wilfrid Laurier	0	0	0	0	34	41	49	61	76	92	105	119	124	129	141	136	142	144	178
Western	193	190	187	207	227	257	287	336	421	506	583	661	665	753	867	1,085	1,183	1,207	1,269
Windsor	49	65	82	95	108	117	126	146	160	175	206	238	289	380	477	477	468	494	498
York	7	7	7	12	18	35	53	64	112	160	250	341	439	578	636	867	1,008	1,007	1,056
Sub-total Ontario	1,980	1,924	1,871	2,057	2,344	2,568	2,810	3,166	3,685	4,274	5,223	6,283	7,014	8,023	8,934	10,172	10,606	10,766	11,078
Brandon	0	0	20	22	24	29	34	40	47	55	64	74	80	89	95	128	109	116	108
Manitoba	270	271	272	301	309	353	377	403	447	492	585	679	804	896	1,034	1,126	1,133	1,173	1,210
Winnipeg	29	31	33	37	42	57	71	99	106	113	125	138	104	135	186	184	171	161	183
Sub-total Manitoba	229	302	325	360	375	439	482	542	600	660	774	891	988	1,120	1,315	1,438	1,413	1,450	1,501
Saskatchewan (Saskatoon)	260	259	258	284	310	334	358	395	498	602	707	813	946	1,011	1,156	1,240	886	886	887
" (Regina)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	362	394	386
Sub-total	260	259	258	284	310	334	358	395	498	602	707	813	946	1,011	1,156	1,240	1,248	1,280	1,273
Saskatchewan	260	259	258	284	310	334	358	395	498	602	707	813	946	1,011	1,156	1,240	1,248	1,280	1,273
Alberta	267	301	336	396	456	535	614	742	724	707	813	920	1,010	1,190	1,266	1,420	1,441	1,513	1,437
Calgary	0	0	0	0	0	0	0	0	0	240	338	437	549	722	668	791	764	799	851
Lethbridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139	141	136	135	135
Sub-total Alberta	267	301	336	396	456	535	614	742	724	947	1,151	1,357	1,559	1,912	2,073	2,352	2,341	2,447	2,473
British Columbia	419	471	523	594	665	725	785	859	950	1,044	1,129	1,218	1,292	1,450	1,530	1,642	1,665	1,653	1,789
Simon Fraser	0	0	0	0	0	0	0	0	0	0	0	312	339	345	329	336	325	380	373
Victoria	0	0	0	0	78	101	124	140	164	188	230	273	333	385	416	415	417	396	438
Sub-total	419	471	523	594	743	826	909	999	1,114	1,229	1,359	1,803	1,964	2,180	2,275	2,393	2,407	2,429	2,600
British Columbia	419	471	523	594	743	826	909	999	1,114	1,229	1,359	1,803	1,964	2,180	2,275	2,393	2,407	2,429	2,600
Total	4,737	4,841	4,973	5,463	6,141	6,820	7,521	8,651	9,858	11,389	13,538	16,130	18,269	20,762	23,665	26,108	26,815	27,551	28,444
Other Institutions:	261	302	344	463	394	430	465	474	590	696	656	573	595	1,077	939	815	920	859	1,498
Grand Total:	4,998	5,138	5,317	5,926	6,535	7,260	7,986	9,125	10,605	12,085	14,394	16,703	18,864	21,839	24,604	26,923	27,735	28,410	29,942

* Derived through extrapolation

University of Manitoba increased from 301 teachers to 1,210; Saskatchewan from 284 to 887; Alberta from 396 to 1,487, and British Columbia from 594 to 1,789.

The number of university teachers in most provinces increased five to six times, except in Nova Scotia and New Brunswick, which overall had slightly lower growth rates. However, within these two provinces, the faculty of universities like Dalhousie, St. Mary's and Moncton increased as rapidly as the national trend.

The same information is expressed in percent, by university and by province (Table 2). Whereas McGill and Toronto accounted for 22.5% of the total number of university teachers in Canada in 1959-60, this declined to 12.5% by 1974-75, reflecting the more rapid growth of other universities. Memorial's share, which had been 1.1%, increased 16 years later to 2.5%. The universities of Nova Scotia experienced a gradual decline, 5.8% to 4.6%; a smaller decrease occurred in New Brunswick: 3.6% to 3.0%; Quebec increased its share of teachers from 19.2% to 21.3%, while Ontario's rose slightly from 34.7% to 37.0%. Manitoba, Saskatchewan and British Columbia underwent a decline in contrast to Alberta, where the percentage of teachers rose from 6.7% to 8.3%. On the average, the "other institutions" accounted for 3-5%, a proportion that has remained stable in recent years.

Table 2
Percentage Distribution of University Teachers by University and by Province, 1956/57 - 1974-75

University	56/57	57/58*	58/59	59/60*	60/61	61/62*	62/63	63/64	64/65*	65/66	66/67*	67/68	68/69	69/70	70/71	71/72	72/73	73/74	74/75
Memorial	0.8	1.0	1.1	1.1	1.0	1.2	1.3	1.4	1.4	1.4	1.4	1.4	1.8	1.9	2.0	2.2	2.4	2.5	2.5
Prince Edward Island ...	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
Acadia	1.1	1.1	1.2	1.2	1.1	1.1	1.0	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Dalhousie	1.8	1.9	2.0	1.8	0.6	1.8	1.9	2.0	1.9	1.9	1.9	2.0	2.1	1.9	2.0	2.1	2.2	2.2	2.3
Mount St. Vincent	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3
N.S. Technological	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
St. Francis Xavier	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.1	1.0	0.9	0.9	0.8	0.8	0.8	0.9	0.8	0.7	0.7
St. Mary's	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5
Sub-Total Nova Scotia	5.8	6.0	6.1	5.8	5.6	5.5	5.5	5.4	5.0	4.7	4.7	4.6	4.7	4.5	4.5	4.7	4.7	4.6	4.6
Mount Allison	1.2	1.2	1.2	1.1	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4
New Brunswick	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.8	1.7
Moncton	0.2	0.4	0.6	0.6	0.7	0.6	0.5	0.5	0.6	0.6	0.6	0.5	0.7	0.7	0.7	0.7	0.8	0.9	0.9
Sub-Total New Brunswick	3.1	3.4	3.6	3.6	3.6	3.5	3.4	3.3	3.2	3.2	3.0	2.9	3.0	2.9	2.7	2.7	2.8	3.1	3.0
Bishop's	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2
McGill	8.7	8.5	8.4	8.0	7.6	7.7	7.7	7.3	6.9	6.6	6.1	5.8	5.8	5.3	4.8	4.2	4.2	4.4	4.2
Sir Geo. Williams	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.1	1.3	1.4	1.4	1.6	1.5	1.4	1.3	1.3	1.3	1.3
Montreal	5.4	5.3	5.2	5.0	4.9	4.6	4.4	4.9	5.1	5.2	5.6	5.8	5.7	5.3	4.9	5.1	5.1	5.0	5.0
Loyola	0.5	0.5	0.5	0.6	0.7	0.7	0.8	1.0	1.0	1.0	1.0	1.1	1.0	1.1	1.0	0.8	0.9	0.9	0.8
Quebec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.5	3.5
Laval	3.8	4.2	4.5	4.3	4.0	4.2	4.3	4.5	4.9	5.2	4.8	4.5	4.6	4.7	5.1	4.3	4.3	4.3	4.3
Shenbrooke	1.7	1.3	1.0	0.9	0.9	1.1	1.3	1.4	1.2	1.1	1.2	1.3	1.5	1.7	1.8	2.0	2.0	2.0	1.9
Sub-Total Quebec	20.3	20.2	20.1	19.2	18.5	18.6	18.8	20.4	20.6	20.8	20.5	20.2	20.6	20.0	22.5	21.6	21.5	21.7	21.3
Brock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7
Carleton	0.9	1.2	1.6	1.7	1.7	1.5	1.4	1.8	1.7	1.6	1.8	1.9	2.0	1.9	2.0	2.1	2.1	2.1	2.0
Guelph	5.0	4.8	4.6	4.1	3.7	3.5	3.3	2.9	2.8	2.7	3.0	3.2	3.2	2.9	2.8	2.6	2.6	2.6	2.5
Lakehead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.8	0.9	0.8	0.8	0.8
Laurentian	0.0	0.0	0.0	0.2	0.4	0.4	0.4	0.4	0.6	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.9

Table 2 (con't)

Percentage Distribution of University Teachers by University and by Province, 1956/57 - 1974-75

University	56/57	57/58	58/59	59/60	60/61	61/62	62/63	63/64	64/65	65/66	66/67	67/68	68/69	69/70	70/71	71/72	72/73	73/74	74/75
McMaster	2.1	2.0	1.9	1.9	1.9	2.0	2.1	2.1	2.3	2.4	2.3	2.2	2.0	2.0	1.9	2.5	2.6	2.6	2.6
Ottawa	3.2	3.5	3.7	3.6	3.5	3.3	3.2	3.2	2.8	2.5	2.4	2.4	2.5	2.7	2.7	3.1	3.2	3.1	3.0
Queens	3.4	3.5	3.6	3.4	3.3	3.3	3.2	3.3	3.3	3.2	3.1	3.0	3.0	3.1	2.8	2.8	2.9	2.9	2.7
Toronto	20.0	17.2	14.6	14.5	14.4	13.9	13.4	12.3	11.8	11.4	11.2	11.1	10.9	9.9	9.5	8.8	8.7	8.5	8.3
OISE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.7	0.6	0.6	0.5	0.5	0.5	0.5
Trent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Waterloo	0.0	0.0	0.0	0.0	1.0	1.3	1.5	1.8	2.0	2.5	2.6	2.7	2.5	2.6	2.6	2.7	2.6	2.6	2.5
Wilfrid Laurier	0.0	0.0	0.0	0.0	0.5	0.6	0.6	0.7	0.7	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.6
Western	3.9	3.7	3.5	3.5	3.4	3.5	3.6	3.7	4.0	4.2	4.0	4.0	3.5	3.4	3.5	4.0	4.3	4.2	4.2
Windsor	1.0	1.3	1.5	1.6	1.7	1.6	1.6	1.6	1.5	1.4	1.4	1.4	1.5	1.7	1.9	1.8	1.7	1.7	1.7
York	0.1	0.1	0.1	0.2	0.3	0.5	0.7	0.7	1.1	1.3	1.7	2.0	2.3	2.6	2.6	3.2	3.6	3.5	3.5
Sub-total Ontario	39.6	37.3	35.2	34.7	35.9	35.4	35.2	34.7	34.7	35.4	36.3	37.6	37.2	36.7	36.3	37.8	38.2	37.9	37.0
Brandon	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
Manitoba	5.4	5.3	5.1	5.1	4.7	4.9	4.7	4.4	4.2	4.1	4.1	4.1	4.3	4.1	4.2	4.2	4.1	4.1	4.0
Winnipeg	0.6	0.6	0.6	0.6	0.6	0.8	0.9	1.1	1.0	0.9	0.9	0.8	0.6	0.6	0.8	0.7	0.6	0.6	0.6
Sub-total Manitoba ...	6.0	5.9	6.1	6.1	5.7	6.1	6.0	5.9	5.6	5.5	5.4	5.3	5.2	5.1	5.3	5.3	5.1	5.1	5.0
Saskatchewan (Saskatoon)	5.2	5.0	4.9	4.8	4.7	4.6	4.5	4.3	4.7	5.0	4.9	4.9	5.0	4.6	4.7	4.6	3.2	3.1	3.0
Saskatchewan (Regina) ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	1.3
Sub-total Saskatchewan	5.2	5.0	4.9	4.8	4.7	4.6	4.5	4.3	4.7	5.0	4.9	4.9	5.0	4.6	4.7	4.6	4.5	4.5	4.3
Alberta	5.3	5.8	6.3	6.7	7.0	7.4	7.7	8.1	6.8	5.8	5.6	5.5	5.4	5.4	5.1	5.3	5.2	5.3	5.0
Calgary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.3	2.6	2.9	3.3	2.7	2.9	2.6	2.8	2.8
Lethbridge	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.5	0.5	0.5
Sub-total Alberta	5.3	5.8	6.3	6.7	7.0	7.4	7.7	8.1	6.8	7.8	8.0	8.1	8.3	8.7	8.4	8.7	8.4	8.6	8.3
British Columbia	8.4	9.1	9.8	10.0	10.2	10.0	9.8	9.4	9.0	8.6	7.8	7.3	6.8	6.6	6.2	6.1	6.0	5.8	6.0
Simon Fraser	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.8	1.6	1.3	1.2	1.2	1.3	1.2
Victoria	0.0	0.0	0.0	0.0	1.2	1.4	1.6	1.5	1.5	1.6	1.6	1.6	1.8	1.8	1.7	1.5	1.5	1.4	1.5
Sub-total British Columbia	8.4	9.1	9.8	10.0	11.4	11.4	11.4	10.9	10.5	10.2	9.4	10.8	10.4	10.0	9.2	8.9	8.7	8.5	8.7
Total	94.8	93.9	93.5	92.2	94.0	94.0	94.2	94.8	94.4	94.2	95.4	96.6	96.8	95.1	96.2	97.0	96.7	97.0	95.0
Other Institutions	5.2	6.1	6.5	7.8	6.0	6.1	5.8	5.2	5.6	5.8	4.6	3.4	3.2	4.9	3.8	3.0	3.3	3.0	5.0
Grand Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Interpolated

Table 3 traces growth in the number of teachers, expressed as an index, using the year in which the Federal-Provincial Fiscal Arrangements Act was instituted, 1967-68, as a base of 100. The index rose to 176 in 1974-75, but with considerable provincial and institutional variations.

Growth was most rapid during the late sixties, and levelled off since 1972-73. With the exception of Alberta, the Western provinces experienced slower growth than the national average. The number of teachers in the French-speaking universities of Quebec increased more rapidly than in the English-speaking universities there. The number in some Ontario universities has doubled or tripled since 1967-68, but the total for this province conforms to the national average of 176 for 1974-75.

University Teachers in Eight Fields^{5.}

Table 4 shows that between 1956-57 and 1974-75, the total number of university teachers increased almost sixfold, from 4,973 to 29,710. The most dramatic gains were in the social sciences, fine and applied arts, and

5. A cautionary note: Universities have reported teachers by departmental affiliation which usually indicates the subject taught by the individual. But occasionally, a professor might have cross-appointments in two departments or might teach other related subjects.

Table 3

Index (1967-68 = 100) of University Teachers by Institution and Province, 1967-68 to 1974-75

University	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
1 Memorial	100	142	177	209	251	260	295	313
2 Prince Edward Island	100	121	122	125	125	132	124	119
3 Acadia	100	106	123	137	149	148	155	161
4 Dalhousie	100	118	128	149	173	188	189	212
5 Mount St. Vincent	100	110	112	104	124	138	150	160
6 N.S. Technical College	100	114	124	127	125	116	122	118
7 St. Francis Xavier	100	105	113	128	153	152	137	137
8 St. Mary's	100	129	171	178	196	201	210	199
Sub-total Nova Scotia	100	114	128	142	162	169	169	179
9 Mount Allison	100	107	102	107	110	115	118	118
10 New Brunswick	100	111	126	131	141	151	169	174
11 Moncton	100	135	160	174	212	226	272	288
Sub-total New Brunswick	100	115	127	134	148	158	178	184
12 Bishop's	100	109	118	121	134	104	109	112
13 McGill	100	113	121	122	118	120	129	131
14 Sir George Williams	100	133	141	154	153	156	165	169
15 Montréal	100	109	120	124	140	144	146	152
16 Loyola	100	107	129	129	112	133	135	138
17 Québec	N/A							
18 Laval	100	117	137	169	156	160	165	171
19 Sherbrooke	100	130	169	208	245	256	259	267
Sub-total Quebec(1)	100	115	129	164	172	177	182	188
20 Brock	100	119	160	197	242	257	264	284
21 Carleton	100	114	130	149	179	181	183	188
22 Guelph	100	111	117	129	130	135	136	137
23 Lakehead	100	116	153	182	209	213	196	202
24 Laurentian	100	117	147	178	202	216	223	244
25 McMaster	100	107	119	131	185	195	205	211
26 Ottawa	100	114	145	160	205	215	217	221
27 Queen's	100	113	134	140	153	162	147	165
28 Toronto	100	111	117	126	128	131	130	133
29 OISE	100	130	136	143	132	133	135	158
30 Trent	100	128	143	152	199	203	218	222
31 Waterloo	100	104	124	143	160	157	161	163
32 Wilfrid Laurier	100	104	108	118	114	119	121	150
33 Western	100	101	114	131	166	179	183	192
34 Windsor	100	121	160	200	200	197	208	209
35 York	100	129	170	187	254	296	295	310
Sub-total Ontario	100	112	128	142	162	169	171	176
36 Brandon	100	108	120	128	173	147	151	146
37 Manitoba	100	118	132	152	166	167	173	178
38 Winnipeg	100	75	98	135	133	124	117	133
Sub-total Manitoba	100	111	126	148	161	159	163	168
39-40 Saskatchewan (Saskatoon & Regina)	100	116	124	142	152	154	157	157
41 Alberta	100	110	129	138	154	154	164	162
42 Calgary	100	126	165	153	181	175	183	195
43 Lethbridge	N/A							
Sub-total Alberta(2)	100	115	141	153	177	177	180	182
44 British Columbia	100	106	119	126	135	137	135	147
45 Simon Fraser	100	109	111	105	108	104	122	120
46 Victoria	100	122	141	152	152	153	145	160
Sub-total British Columbia	100	109	121	126	133	133	135	144
Total Universities	100	113	129	147	162	166	173	176

(1) Includes since 1970-71 the University of Québec.

(2) Includes since 1970-71 the University of Lethbridge.

Table 4
University Teachers by Field, 1956-57 to 1974-75

	1956-57	1958-59	1960-61	1962-63	1963-64	1965-66	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
Education	282	335	485	620	710	908	1,290	1,460	1,650	2,302	2,470	2,538	2,682	2,906
Fine and applied arts	117	100	111	147	170	281	481	549	719	912	929	1,031	1,048	1,161
Humanities	1,064	1,280	1,558	1,940	2,314	3,125	4,102	4,524	5,131	5,714	6,043	6,107	6,000	6,007
Social sciences	649	791	942	1,214	1,500	2,225	3,386	3,964	4,780	5,226	6,128	6,308	6,575	6,957
Biological sciences	790	742	781	900	1,019	1,248	1,553	1,759	2,046	1,711	1,765	1,930	1,988	2,082
Applied sciences	579	633	805	935	1,011	1,178	1,574	1,748	2,074	2,085	2,082	2,152	2,182	2,295
Health professions	580	439	536	646	721	935	1,568	1,837	2,041	3,078	3,479	3,563	3,846	3,960
Physical sciences	912	1,005	1,236	1,490	1,680	2,185	2,749	3,023	3,398	3,576	4,067	4,241	4,218	4,342
Grand total	4,973	5,325	6,454	7,890	9,125	12,085	16,703	18,864	21,839	24,604	26,963	27,870	28,539	29,710

education, where numbers rose to about 10 times the 1956-57 levels. However, part of the increase in education was due to amalgamation of former teachers' colleges with universities. The smallest increase occurred in the biological sciences (less than threefold).⁶.

The same information on teaching fields expressed in percentage terms, shows more markedly the shift among the eight teaching fields (Table 5). In 1956-57, (21.4%) of faculty members taught the humanities and by 1963-64, they were more than one-quarter of the total. The proportion declined to 20.2% in 1974-75; by then teachers of the social sciences had become the largest group, having increased from 13.1% to 23.4%. Representation of teachers of education and fine and applied arts rose somewhat, while the percentage of teachers of the sciences, except the health professions, declined. Whereas in 1956-57 science teachers constituted more than half the total (57.5%), by 1974-75, their proportion had dropped to 42.2%.

Table 6 gives the growth in the eight fields as an index, using 1967-68 as a base of 100. Overall, the index rose to 177.9 with a high of 252.6 in

6. For some years, particularly 1958-59 and 1970-71, definitions used either by Statistics Canada and/or the universities differed from previous years. For example, the 1970-71 decline in biological sciences occurred because many who had taught in that category were transferred that year to the health professions. The decline in the number of teachers for some other fields, i.e. 1958-59 over 1956-57, can be attributed to similar shifts in definition. Therefore, data for these two years require cautious interpretation.

Table 5

Percentage Distribution of University Teachers by Field, 1956-57 to 1974-75

	1956-57	1958-59	1960-61	1962-63	1963-64	1965-66	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
Education	5.7	6.3	7.5	7.9	7.8	7.5	7.7	7.7	7.5	9.3	9.2	9.1	9.4	9.8
Fine and applied arts	2.3	1.9	1.7	1.8	1.9	2.3	2.9	2.9	3.3	3.7	3.4	3.7	3.7	3.9
Humanities	21.4	24.0	24.1	24.5	25.3	25.9	24.5	24.0	23.5	23.3	22.6	21.9	21.0	20.2
Social sciences	13.1	14.9	14.6	15.5	16.4	18.4	20.3	21.0	21.9	21.2	22.7	22.6	23.0	23.4
Biological sciences	15.9	13.9	12.1	11.4	11.2	10.3	9.3	9.3	9.4	7.0	6.6	6.9	7.0	7.0
Applied sciences	11.6	11.9	12.5	11.8	11.1	9.7	9.4	9.3	9.5	8.5	7.7	7.7	7.6	7.7
Health professions	11.7	8.2	8.3	8.2	7.9	7.7	9.4	9.7	9.3	12.5	12.9	12.8	13.5	13.3
Physical sciences	18.3	18.9	19.2	18.9	18.4	18.1	16.5	16.0	15.6	14.5	15.1	15.2	14.8	14.6

Table 6
Growth Pattern of University Teachers expressed as an Index (1967-68=100) by Field, 1956-57 to 1974-75

	1956-57	1958-59	1960-61	1962-63	1963-64	1965-66	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
Education	21.9	26.0	37.6	48.1	55.0	70.4	100.0	113.2	127.9	178.5	191.5	196.7	207.9	225.3
Fine and applied arts	24.3	20.0	23.1	30.6	35.3	58.4	100.0	114.1	149.5	189.6	193.1	214.3	217.9	241.4
Humanities	25.9	31.2	38.0	47.3	56.4	76.2	100.0	110.3	125.1	139.3	147.3	148.9	146.3	146.4
Social sciences	19.2	23.4	27.8	35.9	44.3	65.7	100.0	117.1	141.2	154.3	181.0	186.3	194.2	205.5
Biological sciences	50.9	47.8	50.3	58.0	65.6	80.4	100.0	113.3	131.8	110.2	113.7	124.3	128.0	154.1
Applied sciences	36.8	40.2	51.1	59.3	64.2	74.8	100.0	111.1	131.8	132.5	132.3	136.7	138.6	145.8
Health professions	37.0	28.0	34.2	41.2	46.0	59.6	100.0	117.2	130.2	196.3	221.9	227.2	245.3	252.6
Physical sciences	33.2	36.6	45.0	54.2	61.1	79.5	100.0	110.0	123.6	130.1	147.9	154.3	153.4	154.9
Grand total	29.8	31.9	38.6	47.2	54.6	72.3	100.0	112.9	130.7	147.3	151.4	166.9	170.9	177.9

the health professions and a low of 134.1 in the biological sciences. Education, fine and applied arts, and the social sciences grew much more rapidly than the average for all fields. The sciences have remained considerably below average, with the exception of the already mentioned health professions.

Numbers and percentage distributions are given in Tables 7 and 8 for the four regions of Canada, for selected years. The concentration of teachers in Ontario in 1958-59 had become even more pronounced by 1973-74. In all but two fields, Ontario had the largest percentage of teachers, representing at least one-third, and sometimes more than 40%, of the total. Teachers in the west made up the largest proportion in education and the biological sciences.

The Percentage of Female University Teachers

University teaching has long been the preserve of males. In 1958-59, 10.7% were female, a proportion that increased slightly to 13.0%, but which, in the last few years, has remained stable (Table 9). The percentage of women teaching in fields that females have traditionally entered (education and nursing), has declined since 1958-59, although they still constitute more than one-fifth of each group. In fine and applied arts the proportion of female teachers has remained constant, at about 18%. Their representation

Table 7
University Teachers by Field and Region, Selected Years

Atlantic Provinces	1958 - 59			1963 - 64			1968 - 69			1973 - 74					
	Quebec	Ontario	Western Provinces	Atlantic Provinces	Quebec	Ontario	Western Provinces	Atlantic Provinces	Quebec	Ontario	Western Provinces	Atlantic Provinces			
Education	57	76	153	78	119	163	331	148	221	400	659	347	531	829	908
Fine Arts	13	27	37	30	21	35	78	54	102	140	241	117	213	355	377
Humanities	316	488	238	293	599	843	515	583	914	1,880	1,047	742	1,077	2,615	1,396
Social Sciences	207	302	174	135	352	558	413	338	831	1,610	1,097	707	1,392	2,680	1,617
Biological Sciences	136	318	212	63	214	396	319	138	345	671	566	172	436	631	670
Applied Science	131	217	194	111	225	385	262	176	454	689	390	210	590	805	511
Health Professions	103	150	145	50	181	222	248	141	565	573	517	330	891	1,433	1,077
Physical Sciences	274	308	255	194	423	556	461	394	637	1,047	879	508	995	1,489	1,104

Table 8
Percentage Distribution of University Teachers by Field and Region, Selected years

	1958-59			1963-64			1968-69			1973-74		
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Atlantic Provinces	Quebec	Ontario	Western Provinces	Atlantic Provinces	Quebec	Ontario	Western Provinces
Education	11.7	17.6	23.5	47.2	11.3	17.2	23.6	47.9	10.4	15.5	28.0	46.1
Fine Arts	20.6	13.4	27.8	38.1	18.3	12.8	21.3	47.6	10.1	19.0	26.1	44.9
Humanities	15.8	25.5	39.3	19.2	13.0	26.6	37.5	22.9	13.2	20.7	42.5	23.7
Social Sciences	10.6	27.1	39.5	22.8	9.3	24.1	38.3	28.3	8.7	21.4	41.5	28.3
Biological Sciences ..	7.1	19.0	44.4	29.6	6.3	21.6	39.9	32.2	8.0	20.1	39.0	32.9
Applied Science	11.3	21.4	35.5	31.8	11.	22.9	39.2	26.7	10.3	26.6	40.3	22.8
Health Professions ...	6.4	24.2	35.3	34.1	7.1	25.8	31.7	35.4	7.8	31.5	31.9	28.8
Physical Sciences	13.7	28.2	31.8	26.3	11.9	25.9	34.0	28.2	13.3	21.5	35.4	29.7

Table 9

FEMALE UNIVERSITY TEACHERS EXPRESSED AS A PERCENTAGE
OF THE TOTAL BY FIELD, SELECTED YEARS

	1958-59	1963-64	1968-69	1973-74
Education	29.5	25.1	23.8	21.3
Fine and Applied Arts	17.5	16.4	17.5	18.7
Humanities	9.7	12.8	18.1	16.6
Social Sciences	7.8	8.0	8.7	10.2
Biological Sciences	16.5	16.4	16.2	15.7
Applied Sciences	0.3	1.1	0.7	0.7
Health Professions	25.6	27.1	24.8	20.6
Physical Sciences	3.6	4.1	4.8	4.1
Total	10.7	11.6	13.2	13.0

in the humanities and the social sciences has increased. Over the years, the percentage of females teaching the sciences, excluding health professions, has been small.

Average Age of University Teachers

Although the average age of university teachers shows some variations among fields, the group as a whole is relatively young. In 1958-59, the average age was 38.9; by 1973-74, it had risen only to 40.0 (Table 10). The oldest teachers are in the health professions (41.4) and the youngest in the physical sciences (38.9).

Assuming that most professors obtained their appointment by the age of 30, the current average of 40 indicates that the large majority cannot be expected to retire in the next twenty years. Moreover, provided there is no sudden increase in the enrolment rate, demographic trends in the student population preclude any rise in enrolment. Thus, during the eighties, there will be few new openings or replacement positions in university teaching. On the contrary, there might be a decline. However, by the nineties a substantial retirement rate and an upsurge in enrolment will create a sudden demand for a great number of teachers.⁷

7. These issues have been explored in "The New 'Crisis' of Canadian Universities" (Statistics Canada) November 15, 1976.

Table 10

AVERAGE AGE OF UNIVERSITY TEACHERS BY FIELD,
SELECTED YEARS

	1958-59	1963-64	1968-69	1973-74
Education	40.4	40.6	40.0	40.6
Fine and Applied Arts	39.2	39.8	39.7	39.9
Humanities	39.3	39.3	38.0	40.5
Social Sciences	37.8	37.9	36.9	39.9
Biological Sciences	39.2	40.6	40.5	40.8
Applied Sciences	37.4	38.5	38.7	40.6
Health Professions	40.2	41.9	40.6	41.4
Physical Sciences	37.8	37.9	37.4	38.9
Total	38.9	39.4	38.6	40.0

Academic Rank and Salary of University Teachers

The age structure of university teachers is related to their rank distribution (Table 11). In all years, assistant professors were the model group. However, concentration in this rank was greatest in 1968-69 (36.6%), and fell to a little more than one-third of all teachers in 1973-74. Shifts in rank distribution parallel, to some extent, the growing number of teachers, particularly during the mid-sixties, when many were hired as assistant professors. In 1958-59, 49.8% were at the two senior levels (full professor and associate professor); this declined to 45.6% in 1963-64, to 44.8% in 1968-69, and rose again to 53.0% in 1973-74. The increase happened as the assistant professors of the mid-sixties moved through the associate to the full professor level, especially in fields where expansion has been most rapid, such as the human sciences (education, fine and applied arts, humanities and social sciences). In the future, the percentage of associate and full professors can be expected to continue to rise in all fields. In the sciences more than 60% were already in this category in 1973-74. The overall upgrading of academic rank will be costly to universities. Together with inflation, it accounts for the rise in average salary from \$7,492 to \$18,369 in 1973-74 (Table 12).

Since 1958-59, the average salary in the health professions has been higher than the national average (\$20,764 in 1973-74 compared to \$18,369).

Table 11
Percentage Distribution of University Teachers by Rank and Field, Selected Years

	1958 - 59					1963 - 64				
	Professors	Associate Professors	Assistant Professors	Lecturers and Instructors	Others	Professors	Associate Professors	Assistant Professors	Lecturers and Instructors	Others
Education	20.4	25.9	27.5	23.5	2.8	14.3	24.5	31.3	29.1	0.9
Fine and Applied Arts	20.6	26.8	12.4	36.1	4.1	12.8	26.2	33.5	25.6	1.8
Humanities	24.3	18.4	26.6	20.2	10.4	17.6	18.7	29.1	27.9	6.8
Social Sciences	23.0	24.7	30.1	18.2	3.9	18.2	25.3	35.5	19.9	1.2
Biological Sciences	27.2	25.2	32.1	14.6	0.8	23.9	29.3	33.7	11.7	1.4
Engineering and Applied Science	22.9	24.4	34.9	16.2	1.6	19.2	28.4	35.9	16.3	0.2
Health professions	32.2	21.6	27.5	18.1	0.5	25.1	25.1	29.1	20.5	0.1
Physical Science	26.8	24.4	29.1	13.4	6.3	21.4	27.2	34.3	13.6	3.4
Total	27.5	22.3	28.2	17.2	4.7	21.5	24.1	31.8	19.8	2.8

Table 11 (con't)
Percentage Distribution of University Teachers by Rank and Field, Selected Years

	1968 - 69					1973 - 74				
	Professors	Associate Professors	Assistant Professors	Lecturers and Instructors	Others	Professors	Associate Professors	Assistant Professors	Lecturers and Instructors	Others
Education	11.3	26.7	38.4	22.1	1.5	12.8	29.7	37.9	16.0	3.6
Fine and Applied Arts	12.1	21.6	40.2	23.1	3.0	11.8	28.4	37.9	19.3	2.7
Humanities	14.5	20.8	37.2	25.8	1.8	19.3	30.1	35.9	13.1	1.7
Social Sciences	17.5	24.5	41.1	15.6	1.3	19.8	29.2	37.3	12.0	1.7
Biological Sciences	23.0	30.8	35.1	10.3	0.8	27.6	32.7	29.6	8.6	1.6
Engineering and Applied Science	21.5	34.9	34.6	8.0	1.0	27.7	40.5	24.9	5.1	1.9
Health professions	20.2	22.4	31.7	20.0	5.6	22.5	28.1	35.1	12.9	1.4
Physical Science	21.8	28.9	37.8	9.9	1.6	25.8	35.2	29.5	6.7	2.8
Total	19.4	25.4	36.6	16.7	1.8	22.1	30.9	33.6	11.3	2.1

Table 12
 AVERAGE SALARY OF UNIVERSITY TEACHERS BY FIELD,
 SELECTED YEARS

	1958-59	1963-64	1968-69	1973-74
Education	\$ 7,201	\$ 8,988	\$ 12,764	\$ 17,632
Fine and Applied Arts	6,682	8,409	11,762	15,513
Humanities	6,868	8,428	11,746	16,904
Social Sciences	7,212	9,105	12,805	17,607
Biological Sciences	7,589	9,908	13,734	18,468
Applied Sciences	7,368	9,360	13,694	19,175
Health Professions	8,535	10,570	14,703	20,764
Physical Sciences	7,384	9,397	13,352	18,618
Total	7,492	9,367	13,141	18,369

On the other hand, average salaries in the humanities (\$15,513) have been considerably below average sciences. This may be partly due to the relative youth and inexperience of these teachers, but it also seems to indicate a salary differential between the various fields.⁸ Salaries of teachers of the applied sciences have risen most rapidly during the reference period. Whereas in 1958-59, their average salary of \$7,368 was fourth largest, by 1973-74, they were in second place with an average of \$19,175.

Doctoral Qualifications of University Teachers

As measured by the proportion of faculty with doctorates, the quality of Canadian university teachers has improved steadily: from 37.8% in 1956-57 to 56.8% in 1973-74 (Table 13). Despite the rapid increase in the number of university teachers during the sixties, the percentage with a doctoral degree rose simultaneously, particularly during the last few years. There were, of course, considerable variations among disciplines from a high of 82.0% in the physical sciences to a low of 18.7% in fine and applied arts. The latter field does not require a Ph.D. to teach many subjects. Similarly, for some of the social sciences such as business administration and law, a doctorate is frequently less necessary. Nevertheless, for all social sciences, the proportion of teachers with a doctorate increased from 35.8% in 1956-57 to

8. Part II provides more detailed information on the salary structure with a salary index.

55.4% in 1973-74. A similar pattern characterized the humanities. For the health professions the proportion with a Ph.D. grew from 17.1% to only 38.2%. However, in fields like nursing and some specialties of medicine such as surgery the Ph.D. is less appropriate.

The overall percentage of teachers with Ph.D's is likely to increase because a number are now completing their doctorates, and in the future most disciplines will require that appointees be Ph.D.-holders. The proportion of faculty in Canada with a doctoral degree is already substantially higher than in the United States.

Doctoral Qualifications of University Teachers
by Field, 1956-57 to 1973-74

Table 13

Teaching Fields	1956-57	1958-59	1960-61	1962-63	1965-66	1967-68	1969-70	1971-72	1973-74
	(In Percent)								
Education	17.9	20.7	21.3	22.4	21.2	24.8	31.1	35.5	40.1
Fine and Applied Arts	12.4	16.5	17.8	18.9	16.8	16.3	16.9	15.0	18.7
Modern Languages	43.3	41.3	42.1	40.2	36.9	38.4	41.7	49.7	55.9
Humanities	46.6	44.9	45.4	43.6	40.1	41.8	45.5	52.1	58.9
Social Sciences	35.8	36.9	43.2	43.4	41.9	44.0	47.2	51.0	55.4
Biological Sciences	42.2	51.0	53.8	56.1	61.7	66.5	68.6	73.4	76.1
Applied Sciences	19.1	20.8	22.8	28.2	34.8	47.4	54.3	56.8	59.7
Health Professions	17.1	23.3	26.8	27.2	26.8	28.5	29.2	39.7	38.2
Physical Sciences	59.4	65.4	67.8	67.8	68.5	71.7	76.5	78.5	82.0
Total	37.8	41.7	43.7	44.4	44.4	46.9	50.2	53.2	56.8

PART II

The Number of Teachers, by Discipline

Part II discusses the characteristics of faculty in 47 disciplines. This breakdown by discipline is a better measure of changes that have taken place than the grouping by eight fields in Part I. Since it is impossible to elaborate on each category, descriptive analysis will focus on some highlights.⁹

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9. As indicated in footnote 3, data were obtained from reporting institutions that have varied over time, but the major universities were always included. In the early sixties, many classical colleges of Quebec and some junior colleges in the Western Provinces were part of the university teachers' survey. In later years, many religious institutions were added, but did not report regularly. Although from a statistical point of view, the selection of institutions and their irregular response has been confusing, this has hardly influenced the results, because these institutions accounted for less than 5% of the total number of teachers.

Another problem was classification by discipline. Institutions reported by departmental affiliation, which did not always correspond to the discipline taught, particularly for those teachers who held joint appointments in two departments. In other cases, such as anthropology and sociology, which in earlier years were frequently administered through one department, it was difficult to decide what number were teaching either of the two disciplines. Similarly, departments of political economy, primarily at Toronto and McGill, included both teachers of economics and political science. In this case, these teachers have been placed in the economics category.

A final difficulty has been allocation of teachers recorded as teaching in general areas such as humanities, social sciences and physical sciences; those in institutions that did not report any departmental affiliation (some administrative positions), and a residual group of "not reported". For the purposes of this report, these groups were allocated according to the percentage distribution within each teaching field. As a result, the number in each of the 47 disciplines is

All disciplines underwent faculty expansion - some more, some less. For example, the number of teachers in classics, which encompasses Latin, Greek, Hebrew and classical studies, increased from 119 in 1956-57 to only 264 in 1974-75. This reflects the structural changes in university education and the declining demand for classical studies (Table 14). In contrast, the

9 cont'd.

higher than reported in Statistics Canada publications. These adjustments for each discipline apply only to a fraction of the total number of full-time university teachers each year, and have little effect on the general trend for each discipline. The analysis does not emphasize specific numbers, but rather the magnitude and general trends.

A number of additional qualifications should be considered. For example, the category, "area studies", could be offered in a multitude of disciplines, and consequently, the number of teachers has fluctuated over time. Since the number reported has been only about 100, no attempt was made to refine this category.

Other caveats could be made in cases where a sudden increase or decline in the number of teachers from one year to the next could not be explained by the existing growth pattern. A case in point is the concomitant decline in some of the biological sciences and increase in the health professions, which are attributable to definition changes.

As indicated before, 1970-71 data deviate substantially from preceding as well as subsequent years, largely because of changes Statistics Canada instituted for one year only. Nonetheless, in a number of instances, no explanation for abrupt changes is apparent. For example, the number of architecture professors declined from 311 in 1969-70 to 175 in 1971-72. Similarly, the pattern of some disciplines in 1958-59 is inconsistent with the overall trend, e.g., it is unlikely that the number of teachers in fine and applied arts declined from 117 in 1956-57 to 100 in 1958-59. These types of potential errors and omissions are possibly caused by coding or definitional errors by Statistics Canada. For a single year and/or discipline, this is not serious enough to distort the general pattern of growth. Since the data on 26 variables are obtained from university administrative records, there is a danger that files on individual teachers might be out of date and occasionally incomplete. This might be true for a

number of history teachers has undergone remarkable expansion from 125 to 1,042 during the 19-year period. Most other disciplines in the humanities experienced a similar dramatic increase in numbers. For example, the number of Spanish teachers increased from 9 to 158, and the number of English teachers rose from 253 to 1,401. Numbers in the humanities have levelled off or even declined slightly since the early seventies, indicating a shift to the social sciences including education. Anthropology teachers increased from 9 in 1956-57 to 346 in 1974-75. The same spectacular rise occurred in sociology (32 to 886) and psychology (88 to 1,268). An outstanding feature of most of the social sciences has been their continued growth in the early seventies, particularly in applied subjects such as commerce and business administration where the number of faculty rose from 923 in 1971-72 to 1,227 in 1974-75; law (from 428 to 526), and social work (from 234 to 333). The pattern of faculty increase in these

9 cont'd.

those hired without a Ph.D., who in the meantime completed their degree. In other instances, there might be errors in residence status if immigrant professors have eventually become Canadian citizens.

A more serious deficiency in the data is the failure to collect information about the number of "contact hours" and courses taught, supplemental income through consulting, summer school, and teaching continuous education courses, and motivational and attitudinal information, similar to that available from recent studies in the United States and other countries. This type of information would be desirable in order to ascertain the perceptions and attitudes of the 30,500 university teachers who have a strong impact on the half million full- and part-time students at Canadian universities and colleges. Another area where information is limited is research activities of the teachers, their allocation of time among such functions as teaching, research, administration and community service.

Information on part-time teachers is non-existent. Not even their numbers are known.

disciplines reflects enrolment growth at a time when enrolment has levelled off in other disciplines. The increase in the number of teachers in these applied social sciences, does not correspond to the considerable increase in enrolment in these subjects.^{10.}

The number of teachers in some scientific disciplines did not rise so rapidly, e.g., agriculture, from 243 in 1956-57 to 366 in 1974-75. However, in a number of instances, teachers formerly classified under agriculture may have been reclassified, and are now reported under another discipline in the biological sciences. A similar situation exists for some disciplines included under engineering. The number of chemical engineering teachers increased from 38 to 242, and in electrical engineering from 74 to 394; but in civil engineering the number grew only from 152 to 427. In the medical sciences, the ranks of teachers of dentistry grew from 55 to 273, and and pharmacy from 25 to 137. In the physical sciences, chemistry increased its number of teachers from 334 in 1956-57 to 1,016 in 1969-70, and has since levelled off.

Although the size of the faculty in all disciplines expanded during

10. This question has been discussed in relation to teachers of business and administration in a separate report entitled "Recent Developments of Business Education at Canadian Universities". (Statistics Canada, November 1976)

Table 14

FULL-TIME UNIVERSITY TEACHERS BY DISCIPLINE, 1956-57 to 1974-75

	1956/ 1957	1957/ 1958*	1958/ 1959	1959/ 1960*	1960/ 1961	1961/ 1962*	1962/ 1963	1963/ 1964	1964/ 1965*	1965/ 1966	1966/ 1967*	1967/ 1968	1968/ 1969	1969/ 1970	1970/ 1971	1971/ 1972	1972/ 1973	1973/ 1974	1974/ 1975
Physical Education	97	99	101	111	121	135	149	183	210	238	286	334	385	440	425	579	620	632	659
Education	185	209	234	299	364	417	471	527	599	670	813	956	1,075	1,210	1,877	1,891	1,918	2,050	2,247
Sub-total Education	282	308	335	410	485	552	620	710	809	908	1,099	1,290	1,460	1,650	2,302	2,470	2,538	2,682	2,906
Music	52	49	47	52	57	62	67	79	105	131	170	209	237	296	368	396	423	425	435
Fine & Applied Arts	65	54	53	53	54	67	80	91	120	150	211	272	312	423	544	533	608	623	726
Sub-total Fine Arts	117	108	100	105	111	129	147	170	225	281	381	481	549	719	912	929	1,031	1,048	1,161
Classics	119	127	135	149	163	170	177	196	209	222	242	261	284	329	269	277	275	269	264
History	125	135	146	167	187	219	250	305	374	443	534	626	714	856	935	1,008	1,069	1,037	1,042
Library and Records																			
Science	18	14	10	12	13	18	23	26	31	36	44	53	63	80	88	94	92	93	95
Mass Media Studies	7	6	5	4	4	4	4	4	5	6	7	8	10	13	31	72	72	83	101
English	253	289	324	361	398	452	506	602	722	842	986	1,130	1,217	1,372	1,469	1,500	1,479	1,465	1,401
French	113	147	181	207	233	247	261	348	422	496	547	597	687	734	805	877	864	776	787
German	42	45	47	54	61	66	72	72	91	110	123	137	148	166	195	210	222	224	215
Spanish	9	12	16	17	18	21	24	29	44	58	63	68	86	94	127	151	154	156	156
Other Modern Languages	113	99	85	95	106	140	173	226	264	301	385	469	513	581	630	654	675	667	658
Philosophy	148	168	187	202	217	251	285	326	365	405	455	505	554	618	635	697	701	693	709
Religious Studies	117	130	144	151	158	161	165	180	193	206	227	248	248	288	530	503	504	537	579
Sub-total Humanities	1,064	1,172	1,280	1,419	1,558	1,749	1,940	2,314	2,720	3,125	3,613	4,102	4,524	5,131	5,714	6,043	6,107	6,000	6,007
Anthropology	9	10	12	15	19	20	21	32	41	51	77	103	117	141	195	269	334	331	346
Area Studies	62	59	56	53	51	59	67	69	89	110	131	153	173	174	140	105	95	119	122
Commerce, Business																			
Administration	107	126	146	154	161	177	192	236	283	331	417	502	607	685	712	923	952	1,051	1,227
Economics	173	179	186	201	216	244	272	312	367	423	508	594	679	762	766	860	893	904	952
Geography	38	47	56	68	79	94	109	142	179	215	270	325	368	453	505	589	618	609	615
Law	62	72	82	94	105	120	134	141	164	187	232	278	308	359	398	428	417	504	526
Political Science	21	29	36	45	54	73	93	123	162	200	264	328	385	450	561	684	726	691	682
Psychology	88	102	115	122	130	150	170	228	314	400	536	672	756	1,010	1,013	1,163	1,196	1,229	1,268
Social Work	57	58	59	62	66	69	72	102	108	113	122	131	161	198	234	274	271	289	333
Sociology	32	38	43	52	61	72	84	115	155	195	248	300	410	548	702	829	806	848	886
Sub-total Social Sciences	649	720	791	866	942	1,078	1,214	1,500	1,862	2,225	2,805	3,386	3,964	4,780	5,226	6,124	6,308	6,575	6,957

Table 14 (con't)

FULL-TIME UNIVERSITY TEACHERS BY DISCIPLINE, 1956-57 TO 1974-75

	1956/ 1957	1957/ 1958*	1958/ 1959	1959/ 1960*	1960/ 1961	1961/ 1962*	1962/ 1963	1963/ 1964	1964/ 1965*	1965/ 1966	1966/ 1967*	1967/ 1968	1968/ 1969	1969/ 1970	1970/ 1971	1971/ 1972	1972/ 1973	1973/ 1974	1974/ 1975
Agriculture	243	230	217	208	199	215	232	239	252	267	286	307	327	336	381	366	385	412	366
Biology	118	112	105	113	120	141	161	223	251	278	365	452	523	691	609	634	658	697	711
Botany	68	66	65	67	70	75	79	88	108	127	130	133	137	145	187	159	188	191	175
Household Science & Related	57	71	86	92	98	99	101	107	113	118	126	134	146	197	160	208	221	238	224
Veterinary Medicine & Sciences	58	55	51	52	54	55	56	52	58	65	75	85	96	125	128	106	157	135	170
Zoology	246	232	218	229	240	255	271	310	351	393	418	442	530	552	246	292	319	315	436
Sub-total Biological Sciences	790	766	742	761	781	840	900	1,019	1,133	1,248	1,400	1,553	1,759	2,046	1,711	1,765	1,928	1,988	2,082
Architecture	42	46	50	53	56	58	60	69	76	83	102	120	138	211	135	175	182	188	214
Chemical Engineering	38	44	49	56	64	68	73	80	92	105	129	153	170	183	213	246	240	241	242
Civil Engineering	152	146	140	167	194	209	224	232	250	268	310	353	320	408	415	440	428	444	427
Electrical Engineering	74	86	99	118	138	154	171	186	205	225	254	282	318	335	393	387	389	286	394
Mechanical Engineering	79	98	117	138	160	167	173	182	195	208	226	244	285	308	347	337	346	331	336
Mining Engineering	100	78	56	58	65	66	67	77	83	88	102	116	117	135	196	111	121	109	112
Forestry	20	24	29	33	36	38	39	41	45	49	54	60	69	91	95	90	78	81	153
Other Applied Sciences	74	84	93	93	92	109	126	144	148	152	199	246	281	404	291	295	468	502	417
Sub-total Applied Sciences	579	606	633	719	805	869	933	1,011	1,094	1,178	1,376	1,574	1,698	2,075	2,085	2,082	2,152	2,182	2,295
Dentistry	55	47	39	47	58	64	69	81	90	99	120	141	170	191	233	236	188	260	273
Medicine	443	373	304	325	369	402	434	477	551	626	867	1,109	1,276	1,369	2,394	2,747	2,880	3,032	3,011
Nursing	57	60	64	66	73	82	91	102	124	146	189	233	287	300	349	383	412	431	540
Pharmacy	25	29	32	33	36	44	52	61	62	64	75	85	106	181	102	113	118	143	137
Sub-total Health Professions	580	509	439	487	536	592	646	721	827	935	1,251	1,568	1,839	2,041	3,078	3,479	3,598	3,866	3,988
Mathematics	245	283	322	362	402	436	471	560	656	753	868	983	1,062	1,223	1,372	1,481	1,394	1,315	1,251
Chemistry	334	327	320	361	402	445	487	539	616	692	765	838	939	1,016	927	1,051	1,183	1,162	1,122
Geology and Related	83	94	113	106	110	123	136	130	156	181	200	220	253	292	330	457	506	516	501
Physics	250	256	260	291	322	359	396	450	505	558	634	708	769	867	946	1,079	1,158	1,124	1,462
Sub-total Physical Sciences	912	960	1,015	1,120	1,236	1,363	1,490	1,679	1,933	2,184	2,467	2,749	3,023	3,398	3,575	4,068	4,241	4,117	4,341
GRAND TOTAL	4,973	5,148	5,335	5,868	6,454	7,172	7,990	9,124	10,603	12,084	14,392	16,703	18,816	21,840	24,603	26,959	27,903	28,458	29,750

* Interpolated

the 19-year period, there have been marked shifts among individual disciplines (Table 15). In most, there was a discernable trend, though the pattern was not always consistent from year to year. The proportion of classics teachers declined from 2.4% of the total in 1956-57 to 0.9% in 1974-75. In contrast, history teachers increased from 2.5% to 3.5% with a high of 3.9% in 1969-70. Some social sciences doubled, tripled and even quadrupled their representation, e.g., commerce and business administration (from 2.2% to 4.1%), geography (from 0.8% to 2.1%). psychology (from 1.8% to 4.3%) and anthropology and sociology (from 0.9% to 4.2%). These percentage changes reflect the more rapid growth of the social sciences in relation to some other disciplines. For instance, the proportion of teachers in agriculture declined from 4.9% to 1.2%, and in chemistry from 6.5% to 3.8%. The percentage of teachers in all engineering disciplines has declined from 11.6% to 7.7%.

To illustrate the growth pattern of each discipline more clearly, an index has been constructed using 1967-68 as a base of one hundred (Table 16). During the eight years from 1967-68 to 1974-75, the index for all disciplines rose from 100.0 to 177.9 with considerable variations among them. For example, by 1974-75 the index for physical education had reached 197.3; for music, 208.1, for social work, 254.2, and for geology, 230.5.

Table 15

PERCENTAGE DISTRIBUTION OF UNIVERSITY TEACHERS
BY DISCIPLINE, 1956-57 to 1974-75

	1956/ 1957	1957/ 1958*	1958/ 1959	1959/ 1960*	1960/ 1961	1961/ 1962*	1962/ 1963	1963/ 1964	1964/ 1965*	1965/ 1966	1966/ 1967*	1967/ 1968	1968/ 1969	1969/ 1970	1970/ 1971	1971/ 1972	1972/ 1973	1973/ 1974	1974/ 1975
Physical Education	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.7	2.2	2.2	2.2	2.2
Education	3.7	4.1	4.4	5.1	5.6	5.8	6.0	5.8	5.6	5.5	5.6	5.7	5.7	5.5	7.6	7.0	6.9	7.2	7.6
Sub-total Education	5.7	6.0	6.3	7.0	7.5	7.7	7.9	7.8	7.6	7.5	7.6	7.7	7.7	7.5	9.3	9.2	9.1	9.4	9.8
Music	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.5
Fine & Applied Arts	1.3	1.1	1.0	0.9	0.8	0.9	1.0	1.0	1.1	1.2	1.4	1.6	1.6	1.9	2.2	1.9	2.2	2.2	2.4
Sub-total Fine Arts	2.3	2.1	1.9	1.8	1.7	1.8	1.8	1.9	2.1	2.3	2.6	2.9	2.9	3.3	3.7	3.4	3.7	3.7	3.9
Classics	2.4	2.5	2.5	2.5	2.5	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.5	1.1	1.0	1.0	1.0	0.9
History	2.5	2.6	2.7	2.8	2.9	3.0	3.2	3.3	3.5	3.7	3.7	3.7	3.8	3.9	3.8	3.7	3.9	3.6	3.5
Library and Records																			
Science	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3
Mass Media Studies	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.3	0.3
English	5.1	5.6	6.1	6.2	6.2	6.3	6.4	6.6	6.8	7.0	6.9	6.8	6.5	6.3	6.0	5.5	5.3	5.1	4.7
French	2.2	2.9	3.4	3.5	3.6	3.4	3.3	3.8	4.0	4.1	3.8	3.6	3.6	3.3	3.3	3.3	3.1	2.7	2.6
German	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7
Spanish	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.6	0.6	0.6	0.5
Other Modern Languages	2.3	1.9	1.5	1.6	1.6	2.0	2.2	2.5	2.5	2.5	2.7	2.8	2.7	2.7	2.5	2.4	2.4	2.3	2.2
Philosophy	3.0	3.3	3.5	3.4	3.4	3.5	3.6	3.6	3.4	3.4	3.2	3.0	3.0	3.0	2.6	2.6	2.5	2.5	2.4
Religious Studies	2.4	2.5	2.7	2.6	2.5	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.3	1.3	2.2	1.9	1.8	1.9	1.9
Sub-total Humanities	21.4	22.8	24.0	24.1	24.1	24.4	24.5	25.3	25.6	25.9	25.2	24.5	24.0	23.5	23.3	22.4	21.9	21.0	20.2
Anthropology	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.6	0.8	1.0	1.2	1.2	1.2
Area Studies	1.2	1.1	1.1	0.9	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.9	0.9	0.8	0.6	0.4	0.3	0.4	0.4
Career, Business																			
Administration	2.2	2.5	2.7	2.6	2.5	2.4	2.4	2.6	2.7	2.7	2.9	3.0	3.2	3.1	2.9	3.4	3.4	3.7	4.1
Economics	3.5	3.9	3.5	3.4	3.3	3.4	3.5	3.4	3.5	3.5	3.5	3.6	3.6	3.5	3.1	3.2	3.2	3.1	3.2
Geography	0.8	0.9	1.1	1.2	1.2	1.3	1.4	1.6	1.7	1.8	1.9	1.9	2.0	2.1	2.0	2.2	2.2	2.1	2.1
Law	1.2	1.4	1.5	1.6	1.6	1.7	1.7	1.5	1.5	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.5	1.8	1.8
Political Science	0.4	0.6	0.7	0.7	0.9	1.0	1.2	1.3	1.5	1.7	1.8	2.0	2.1	2.1	2.3	2.5	2.6	2.4	2.3
Psychology	1.8	2.0	2.2	2.1	2.0	2.1	2.2	2.5	3.0	3.3	3.7	4.0	4.0	4.6	4.1	4.3	4.3	4.3	4.3
Social Work	1.1	1.1	1.1	1.0	1.0	1.0	0.9	1.1	1.0	0.9	0.9	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.2
Sociology	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.3	1.5	1.6	1.8	1.8	2.2	2.5	2.8	3.1	2.9	3.0	3.0
Sub-total Social Sciences	13.1	14.0	14.9	14.7	14.6	15.0	15.5	16.4	17.6	18.4	19.5	20.3	21.0	21.9	21.2	22.7	22.6	23.0	23.4

Table 15 (con't)

PERCENTAGE DISTRIBUTION OF UNIVERSITY TEACHERS

BY DISCIPLINE, 1956-57 to 1974-75

	1956/ 1957	1957/ 1958*	1958/ 1959	1959/ 1960*	1960/ 1961	1961/ 1962*	1962/ 1963	1963/ 1964	1964/ 1965*	1965/ 1966	1966/ 1967*	1967/ 1968	1968/ 1969	1969/ 1970	1970/ 1971	1971/ 1972	1972/ 1973	1973/ 1974	1974/ 1975
Agriculture	4.9	4.5	4.0	3.5	3.1	3.0	3.0	2.6	2.4	2.2	2.0	1.8	1.7	1.5	1.5	1.4	1.4	1.5	1.2
Biology	2.4	2.2	2.0	1.9	1.9	2.0	2.0	2.4	2.4	2.3	2.5	2.7	2.8	3.2	2.5	2.3	2.4	2.4	2.4
Botany	1.4	1.3	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.1	0.9	0.8	0.7	0.7	0.8	0.6	0.6	0.7	0.6
Household Science & Related	1.1	1.4	1.6	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.8	0.9	0.7	0.8	0.8	0.8	0.8
Veterinary Medicine & Science	1.2	1.1	1.0	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.6	0.5	0.6
Zoology	4.9	4.5	4.1	3.9	3.7	3.5	3.4	3.4	3.3	3.2	2.9	2.7	2.8	2.5	1.0	1.1	1.1	1.1	1.5
Sub-total Biological Sciences	15.9	14.8	13.9	12.9	12.1	11.7	11.4	11.2	10.7	10.3	9.7	9.3	9.3	9.4	7.0	6.6	6.9	7.0	7.0
Architecture	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	1.0	0.5	0.7	0.7	0.7	0.7
Chemical Engineering	0.8	0.9	0.9	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.8	0.8
Civil Engineering	3.0	2.8	2.6	2.8	3.0	2.9	2.8	2.5	2.4	2.2	2.2	2.1	2.0	1.9	1.7	1.6	1.5	1.6	1.4
Electrical Engineering	1.5	1.7	1.9	2.0	2.2	2.1	2.2	2.0	1.9	1.9	1.7	1.7	1.7	1.5	1.6	1.5	1.0	1.0	1.3
Mechanical Engineering	1.6	1.9	2.2	2.3	2.5	2.3	2.2	2.0	1.8	1.7	1.6	1.5	1.5	1.4	1.4	1.2	1.2	1.1	1.1
Mining Engineering	2.0	1.5	1.1	1.0	1.0	1.0	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.8	0.4	0.4	0.4	0.4
Forestry	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.5
Other Applied Sciences	1.5	1.6	1.8	1.6	1.4	1.5	1.6	1.6	1.4	1.2	1.4	1.5	1.5	1.9	1.2	1.1	1.7	1.7	1.4
Sub-total Applied Sciences	11.6	11.8	11.9	12.2	12.5	12.1	11.8	11.1	10.3	9.7	9.6	9.4	9.3	9.5	8.5	7.7	7.7	7.6	7.7
Dentistry	1.1	0.9	0.7	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.9	1.0	0.9	0.6	0.9	0.9
Medicine	8.9	7.2	5.7	5.5	5.7	5.6	5.5	5.2	5.2	5.2	6.1	6.6	6.8	6.2	9.7	10.2	10.3	10.6	10.1
Nursing	1.2	1.2	1.2	1.1	1.1	1.2	1.2	1.1	1.2	1.2	1.3	1.4	1.5	1.4	1.4	1.4	1.5	1.5	1.8
Pharmacy	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.8	0.4	0.4	0.4	0.5	0.5
Sub-total Health Professions	11.7	9.9	8.2	8.3	8.3	8.3	8.2	7.9	7.8	7.7	8.7	9.4	9.7	9.3	12.5	12.9	12.8	13.5	13.3
Mathematics	4.8	5.4	6.0	6.1	6.1	6.0	5.8	6.0	6.1	6.1	5.9	5.8	5.6	5.5	5.3	5.0	4.2	3.9	4.2
Chemistry	6.5	6.2	5.9	6.0	6.1	6.1	6.1	5.8	5.7	5.7	5.2	4.9	4.9	4.6	3.6	3.5	3.6	3.5	3.8
Geology and Related	1.6	1.8	1.9	1.8	1.7	1.7	1.7	1.4	1.5	1.5	1.4	1.3	1.3	1.3	1.3	1.5	1.6	1.5	1.7
Physics	5.0	4.9	4.9	4.9	5.0	5.0	5.0	4.9	4.8	4.6	4.4	4.2	4.1	4.0	3.8	4.0	4.2	3.9	4.9
Sub-total Physical Sciences	18.3	18.6	18.9	19.0	19.2	19.0	18.9	18.4	18.2	18.1	17.1	16.5	16.0	15.6	14.5	15.1	15.2	14.8	14.6
GRAND TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Interpolated

Table 16
Growth Pattern (1967-68 = 100) of University Teachers by Discipline, 1956-57 to 1974-75

	1956-57	1957-58*	1958-59	1959-60*	1960-61	1961-62*	1962-63	1963-64	1964-65*	1965-66
Physical education	29.0	29.6	30.2	33.2	36.2	40.4	44.6	54.8	62.9	71.3
Education	19.4	21.9	24.5	31.3	38.1	43.6	49.3	55.1	62.7	70.1
Sub-total education	21.9	23.9	26.0	31.8	37.6	42.8	48.1	55.0	62.7	70.4
Music	24.9	23.4	22.5	24.9	27.2	29.7	32.1	37.8	50.2	62.7
Fine and applied arts	23.9	21.7	19.5	19.5	19.9	24.6	29.4	33.5	44.1	55.2
Sub-total fine arts	24.3	22.5	20.8	21.8	23.1	26.8	30.6	35.3	46.8	58.4
Classics	45.6	48.7	51.7	57.1	62.5	65.1	67.8	75.1	80.1	85.1
History	20.0	21.6	23.3	26.7	29.9	35.0	39.9	48.7	59.7	70.8
Library and records sciences	34.0	26.4	18.9	22.6	24.5	34.0	43.4	49.1	58.5	67.9
Mass media studies	87.5	75.0	62.5	50.0	50.0	50.0	50.0	50.0	62.5	75.0
English	22.4	25.6	28.7	31.9	35.2	40.0	44.8	53.3	63.9	74.5
French	18.9	24.6	30.3	34.7	39.0	43.4	43.7	58.3	70.7	83.1
German	30.7	32.9	34.3	39.4	44.5	48.2	52.5	52.6	66.4	80.3
Spanish	13.2	17.7	23.5	25.0	26.5	30.9	35.3	42.7	64.7	85.3
Other modern languages	24.1	21.1	18.1	20.3	22.6	29.9	36.9	48.2	56.3	64.2
Philosophy	29.3	33.3	37.0	40.0	43.0	49.7	56.4	64.5	72.3	80.2
Religious studies	47.2	52.4	58.1	60.9	63.7	64.9	66.5	72.6	77.8	83.0
Sub-total humanities	25.9	28.6	31.2	34.6	38.0	42.6	47.3	56.4	66.3	76.2
Anthropology	38.7	39.7	11.7	14.6	18.5	19.4	20.4	31.1	39.9	49.5
Area studies	40.5	38.6	36.6	34.6	33.3	38.6	43.8	45.1	58.2	71.9
Commerce, business administration	21.3	25.1	29.1	30.7	32.1	35.3	38.3	47.0	56.4	65.9
Economics	29.1	30.1	31.3	33.8	36.4	41.1	45.8	52.5	61.8	71.2
Geography	11.7	14.5	17.2	20.9	24.3	28.9	33.5	43.7	55.1	66.2
Law	22.3	25.9	29.5	33.8	37.8	43.2	48.2	50.7	59.0	67.3
Political sciences	06.4	08.8	11.0	13.7	16.5	22.3	28.4	37.5	49.4	61.0
Psychology	13.1	15.2	17.1	18.2	19.4	22.3	25.3	33.9	46.7	59.5
Social work	43.5	44.3	45.0	47.3	50.4	52.7	55.0	77.9	82.4	86.3
Sociology	10.7	12.7	14.3	17.3	20.3	24.0	28.0	38.3	51.7	65.0
Sub-total social sciences	19.2	21.3	23.4	25.6	27.8	31.8	35.9	44.3	55.0	65.7
Agriculture	79.2	74.9	70.7	67.8	64.8	70.0	75.6	77.9	82.1	87.0
Biology	26.1	24.8	23.2	25.0	26.5	31.2	35.6	49.3	55.5	61.5
Botany	51.1	49.6	48.9	50.4	52.6	56.4	59.4	66.2	81.2	95.5
Household science and related	42.5	53.0	64.2	68.7	73.1	73.9	75.4	79.9	84.3	88.1
Veterinary medicine and science	68.2	64.7	60.0	61.2	64.5	64.7	65.9	61.2	68.2	76.5
Zoology	55.7	52.5	49.3	51.8	54.3	57.7	61.3	70.1	79.4	88.9
Sub-total biological sciences	50.9	49.3	47.8	49.0	50.3	54.1	58.0	65.6	73.0	80.4
Architecture	35.0	38.3	41.7	44.2	46.7	48.3	50.0	57.5	63.3	69.2
Chemical engineering	24.8	28.8	32.0	36.6	41.8	44.4	47.7	52.3	60.1	68.6
Civil engineering	43.1	41.4	39.7	47.3	55.0	59.2	63.5	65.7	70.8	75.9
Electrical engineering	26.2	30.5	35.1	41.8	48.9	54.6	60.6	66.0	72.7	79.8
Mechanical engineering	32.4	40.2	48.0	56.6	65.6	68.4	70.9	74.6	79.9	85.3
Mining engineering	86.2	67.2	48.3	50.0	56.0	56.9	57.8	66.4	71.6	75.9
Forestry	33.3	40.0	48.3	55.0	60.0	63.3	65.0	68.3	75.0	81.7
Other applied sciences	30.1	34.2	37.8	37.8	37.4	44.3	51.2	58.5	60.2	61.8
Sub-total applied sciences	36.8	38.5	40.2	45.7	51.1	55.2	59.3	64.2	69.5	74.8
Dentistry	39.0	33.3	27.7	33.3	41.1	45.4	48.9	57.5	63.8	70.2
Medicine	40.0	33.6	27.4	29.3	33.3	36.3	39.1	43.0	49.7	56.5
Nursing	24.5	25.8	27.5	28.3	31.3	35.2	39.1	43.8	53.2	62.7
Pharmacy	29.4	34.1	37.7	38.8	42.4	51.8	61.2	71.8	72.9	75.3
Sub-total health professions	37.0	32.5	28.0	31.1	34.2	37.8	41.2	46.0	52.7	59.6
Mathematics	24.9	28.8	32.8	36.8	40.9	44.3	47.9	57.0	66.7	76.6
Chemistry	39.9	39.0	38.2	43.1	48.0	53.1	58.1	64.3	73.5	82.6
Geology and related	37.7	42.7	51.4	48.2	50.0	55.9	61.8	59.1	70.9	82.3
Physics	35.3	36.2	36.7	41.1	45.5	50.7	55.9	63.6	71.3	78.8
Sub-total physical sciences	33.2	34.9	36.6	40.8	45.0	49.6	54.2	61.1	70.3	79.5
Grand total	29.8	30.82	31.9	35.3	38.6	42.9	47.2	54.6	63.5	72.3

*Interpolated.

Table 16 (cont'd)

Growth Pattern (1967-68 = 100) of University Teachers by Discipline, 1956-57 to 1974-75

	1966-67*	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
Physical education	85.6	100.0	115.3	131.8	127.3	173.4	185.6	189.2	197.3
Education	85.0	100.0	112.5	126.6	196.34	197.8	200.6	214.4	235.0
Sub-total education	85.2	100.0	113.2	127.9	178.5	191.5	196.7	207.9	225.3
Music	81.3	100.0	113.4	141.6	176.1	189.5	202.4	203.4	208.1
Fine and applied arts	77.6	100.0	114.8	155.5	200.0	196.0	223.5	229.0	266.9
Sub-total fine arts	79.2	100.0	114.1	149.5	189.6	193.1	214.4	217.9	241.4
Classics	92.7	100.0	108.8	126.1	103.1	106.1	105.4	103.1	101.1
History	85.3	100.0	114.1	136.7	149.4	161.0	170.8	165.7	166.5
Library and records sciences	83.0	100.0	118.9	150.9	166.0	177.4	173.6	175.5	179.2
Mass media studies	87.5	100.0	125.0	162.5	387.5	900.0	900.0	1,037.5	1,262.5
English	87.3	100.0	107.7	121.4	130.0	132.7	130.9	129.7	124.0
French	91.6	100.0	115.1	122.9	134.8	146.9	144.7	130.0	131.8
German	89.8	100.0	108.0	121.2	142.3	153.3	162.0	163.5	156.9
Spanish	92.7	100.0	126.5	138.2	186.8	222.1	226.5	229.4	229.4
Other modern languages	82.1	100.0	109.4	123.9	134.3	139.5	143.9	142.2	140.3
Philosophy	90.1	100.0	109.7	122.4	125.7	138.0	138.8	137.2	140.4
Religious studies	91.5	100.0	100.0	116.1	213.7	202.8	203.2	216.5	233.5
Sub-total humanities	88.1	100.0	110.3	125.1	139.3	147.3	148.9	146.3	146.3
Anthropology	74.8	100.0	113.6	136.9	189.3	261.2	324.3	321.4	335.9
Area studies	85.6	100.0	113.1	113.7	91.5	68.6	62.1	77.8	79.7
Commerce, business administration	83.1	100.0	120.9	136.5	141.8	183.9	189.6	209.4	244.4
Economics	85.5	100.0	114.3	128.3	129.0	144.8	150.3	152.2	160.3
Geography	83.1	100.0	113.2	139.4	155.4	181.2	190.1	187.4	189.2
Law	83.5	100.0	110.8	129.1	143.2	154.0	150.0	181.3	189.2
Political sciences	80.5	100.0	117.4	137.2	171.0	208.5	221.3	210.7	207.9
Psychology	79.8	100.0	112.5	150.3	150.7	173.1	178.0	182.9	188.7
Social work	93.1	100.0	122.9	151.2	178.6	209.2	206.9	220.6	254.2
Sociology	82.7	100.0	136.7	182.7	234.0	276.3	268.7	282.7	295.3
Sub-total social sciences	82.8	100.0	117.1	141.2	154.3	181.0	186.3	194.2	205.5
Agriculture	93.2	100.0	106.5	109.5	124.1	119.2	125.4	134.2	119.2
Biology	80.8	100.0	115.7	152.9	134.7	140.3	145.6	154.2	157.3
Botany	97.7	100.0	103.0	109.0	140.6	119.6	141.4	143.6	131.6
Household science and related	94.0	100.0	109.0	147.0	119.4	155.2	164.9	177.6	167.2
Veterinary medicine and sciences	88.2	100.0	112.9	147.1	150.6	124.7	184.7	158.8	200.0
Zoology	94.6	100.0	119.9	124.9	55.7	66.1	72.2	71.3	98.6
Sub-total biological sciences	90.2	100.0	113.3	131.8	110.2	113.7	124.3	128.0	134.1
Architecture	85.0	100.0	115.0	175.8	112.5	145.8	151.7	156.7	178.3
Chemical engineering	84.3	100.0	111.1	119.6	139.2	160.8	156.9	157.5	158.2
Civil engineering	87.8	100.0	90.7	115.6	117.6	124.7	121.3	125.8	121.0
Electrical engineering	90.1	100.0	112.8	118.8	139.4	137.2	102.5	101.4	139.7
Mechanical engineering	92.6	100.0	116.8	126.2	142.2	138.1	141.8	135.7	137.7
Mining engineering	87.9	100.0	100.9	116.4	169.0	95.7	104.3	94.0	96.6
Forestry	90.0	100.0	115.0	151.7	158.3	150.0	130.0	135.0	255.0
Other applied sciences	80.9	100.0	114.2	164.2	118.3	119.9	190.2	204.1	169.5
Sub-total applied sciences	87.4	100.0	111.1	131.8	132.5	132.3	136.7	138.6	145.8
Dentistry	85.1	100.0	120.6	135.5	165.3	167.4	133.3	184.4	193.6
Medicine	78.2	100.0	115.1	123.4	215.9	247.7	259.7	273.4	271.7
Nursing	81.1	100.0	123.2	128.8	149.8	164.4	176.8	185.0	231.8
Pharmacy	88.2	100.0	124.7	121.9	120.0	132.9	138.8	168.2	161.2
Sub-total health professions	79.8	100.0	117.2	130.2	196.3	221.9	227.2	245.3	252.6
Mathematics	88.3	100.0	108.0	124.4	139.6	150.7	141.8	133.8	127.3
Chemistry	91.3	100.0	112.0	121.2	110.6	125.4	141.2	138.7	133.9
Geology and related	90.9	100.0	115.0	132.7	150.0	207.7	230.0	234.5	230.5
Physics	89.5	100.0	108.6	122.5	133.6	152.4	163.6	158.8	206.5
Sub-total physical sciences	89.7	100.0	110.0	123.6	130.1	147.9	154.3	153.4	159.9
Grand total	86.2	100.0	112.9	130.7	147.3	161.4	166.9	170.9	177.9

Sex Distribution by Discipline

As discussed in Part I, the proportion of female university teachers increased only slightly from 10.7% in 1958-59 to 13.2% in 1968-69 and has since levelled off. The Atlantic and Western provinces have a slightly higher percentage of female teachers than the national average, and Quebec and Ontario have proportionately fewer.

Table 17 shows the proportion of female teachers for four selected years (1958-59, 1963-64, 1968-69, and 1973-74) by region and discipline. Not surprisingly, there were tremendous variations among disciplines which reflect traditional female career patterns. Almost all (98.7%) the teachers of nursing were female, more than three-quarters in household science, half in library science and one-third in social work. By contrast, they represented less than 1% of the faculty in all disciplines of engineering,

Age Distribution by Discipline

Table 18 indicates that teachers in the Atlantic region are, on the average, younger than those in the other three regions. Since 1968-69, the average age has increased from 38.6 to 40.0. In 1973-74, average age varied by discipline from highs of 43.4 in agriculture and 43.0 in religious studies, to lows of 35.5 in law and 37.8 in mathematics. With the exception of a few disciplines, university faculties are relatively young.

Table 17

Female University Teachers Expressed as a Percentage of Total by Discipline and by Region, Selected Years

	1958-59					1963-64				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
Education	31.5	26.3	31.5	29.4	29.6	16.6	21.8	31.2	25.3	25.1
Fine and applied arts	45.9	7.6	11.1	10.8	17.5	33.3	73.8	8.5	11.5	16.4
Classics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
History	3.8	0.0	0.0	10.3	2.8	17.7	1.5	1.7	9.4	6.0
Library and records science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mass media studies	0.0	0.0	20.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0
English	6.1	7.6	13.6	7.8	9.5	13.1	14.8	13.4	16.3	14.7
French	24.2	4.6	22.4	26.3	19.4	20.8	9.1	22.1	29.1	19.8
German	33.3	25.0	21.0	18.7	22.2	38.4	20.0	21.4	16.6	22.8
Spanish	50.0	0.0	0.0	0.0	6.6	28.5	33.3	28.5	12.5	25.0
Other modern languages	36.3	20.8	12.5	14.2	18.2	23.0	27.6	16.6	19.5	21.3
Philosophy	4.5	1.4	1.4	0.0	1.6	2.6	2.7	3.1	0.0	2.5
Religious studies	0.0	0.0	6.4	0.0	2.8	0.0	1.4	2.4	0.0	1.7
Sub-total humanities	10.7	5.6	10.8	11.7	9.7	15.3	11.3	11.3	15.7	12.8
Anthropology	0.0	0.0	0.0	0.0	0.0	0.0	11.1	9.0	0.0	6.6
Commerce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Business administration	7.1	0.0	2.0	5.7	2.9	4.0	0.0	0.0	1.4	0.9
Economics	0.0	0.0	2.2	3.1	1.7	0.0	9.2	2.4	0.0	3.0
Geography	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.7
Law	0.0	0.0	0.0	6.2	1.3	0.0	5.2	1.8	3.5	3.0
Political science	0.0	0.0	9.0	7.1	6.0	8.3	0.0	4.7	5.4	4.3
Psychology	20.0	15.3	12.2	13.6	14.0	8.0	17.5	17.5	11.3	14.8
Social work	0.0	56.5	41.1	60.0	52.7	0.0	42.1	47.8	51.4	46.8
Sociology	12.5	6.2	0.0	0.0	5.0	18.7	6.8	5.7	0.0	6.4
Sub-total social sciences	6.1	9.1	5.9	10.3	7.8	6.6	10.7	6.9	7.7	8.0
Agriculture	0.0	7.6	3.0	3.5	3.8	0.0	3.7	1.3	2.8	2.5
Biology	18.1	6.2	12.9	18.7	12.8	20.0	4.4	6.4	8.1	8.2
Botany	0.0	7.1	6.2	18.7	9.5	0.0	7.6	10.2	12.9	10.4
Household science and related	100.0	80.0	96.1	96.7	93.9	100.0	100.0	94.4	100.0	98.0
Veterinary medicine	0.0	0.0	0.0	33.3	2.0	0.0	0.0	2.0	33.3	3.9
Zoology	6.6	8.3	5.8	4.7	6.1	0.0	7.1	10.6	8.3	8.6
Sub-total biological sciences	31.3	15.4	12.2	20.2	16.5	25.3	15.8	14.6	17.2	16.4
Architecture	0.0	0.0	0.0	8.6	4.1	0.0	0.0	0.0	9.6	4.4
Chemical engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.2
Civil engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.4
Electrical engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	1.1
Mechanical engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forestry	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub-total applied sciences	0.0	0.0	0.0	1.0	0.3	2.7	0.0	1.2	1.1	1.1
Dentistry	0.0	0.0	14.2	0.0	5.2	12.5	0.0	11.1	12.1	8.8
Medicine	0.0	28.9	14.4	7.0	14.6	3.8	19.4	19.0	15.1	17.0
Nursing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pharmacy	0.0	0.0	0.0	10.0	6.4	20.0	12.5	0.0	6.8	8.4
Sub-total health professions	3.7	30.0	32.6	19.3	25.6	28.0	21.5	33.3	25.4	27.1
Mathematics	11.9	1.8	2.4	8.1	4.8	15.0	2.5	4.5	9.2	6.3
Chemistry	5.2	3.4	5.1	4.8	4.5	5.0	3.2	5.7	6.3	5.2
Geology and related	0.0	0.0	2.7	0.0	1.0	0.0	0.0	2.2	0.0	0.8
Physics	0.0	1.7	3.2	0.0	1.6	0.0	1.0	2.5	0.7	1.3
Sub-total physical sciences	6.0	2.1	3.5	3.5	3.6	6.1	2.1	4.1	5.2	4.1
Grand total	12.2	8.6	10.4	12.5	10.7	13.1	10.0	11.0	10.1	11.6

Table 17 (con't)

Female University Teachers Expressed as a Percentage of Total by Discipline and by Region, Selected Years

	1968-69					1973-74				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
Education	20.2	28.0	24.0	23.0	23.8	19.8	24.6	17.8	23.2	21.1
Fine and applied arts	22.2	21.5	17.1	14.9	17.5	17.0	24.4	18.3	16.2	18.7
Classics	0.0	0.0	0.0	0.0	0.0	12.9	9.6	17.7	11.5	14.9
History	10.3	7.8	4.0	10.6	7.3	12.6	8.2	5.6	8.3	7.8
Library and records science	0.0	0.0	0.0	0.0	0.0	33.3	50.0	48.9	58.8	50.0
Mass media studies	0.0	0.0	11.1	0.0	10.0	0.0	8.0	2.5	6.6	5.0
English	17.7	24.5	17.0	22.2	19.9	22.1	20.6	18.7	21.1	20.7
French	37.6	29.2	30.2	34.2	31.9	28.3	22.4	29.6	32.8	28.6
German	25.0	26.6	17.3	21.6	20.6	26.6	36.8	18.0	25.0	21.0
Spanish	6.2	30.0	30.5	41.6	27.3	20.8	33.3	32.0	17.3	28.1
Other modern languages	16.6	25.0	26.2	20.6	24.1	36.1	15.8	21.4	17.4	19.9
Philosophy	5.9	4.1	5.2	4.9	5.0	7.4	5.0	5.3	4.8	5.4
Religious studies	11.1	10.0	3.1	9.0	7.4	10.9	6.0	3.3	1.5	4.7
Sub-total humanities	18.3	18.9	16.8	19.5	18.1	19.5	15.4	16.1	16.8	16.6
Anthropology	0.0	0.0	6.0	12.2	8.1	12.1	10.8	22.1	18.0	17.8
Commerce										
Business administration	10.7	2.2	0.0	0.7	2.0	11.7	3.8	4.6	1.8	4.6
Economics	2.9	5.6	2.5	3.7	3.5	5.4	5.9	3.2	3.9	4.2
Geography	0.0	5.3	3.8	2.8	3.7	0.0	6.0	3.3	3.1	3.6
Law	3.5	2.4	2.5	1.5	2.4	0.0	10.1	4.6	2.0	5.4
Political science	2.3	8.5	6.9	2.2	5.4	2.4	6.9	9.3	5.6	7.4
Psychology	9.6	17.5	12.2	9.5	12.1	15.0	19.1	17.5	10.7	15.9
Social work	40.0	44.1	43.1	43.5	43.4	52.0	33.8	33.3	27.0	33.2
Sociology	21.7	19.3	14.5	10.0	15.2	17.4	19.2	13.7	10.7	16.7
Sub-total social sciences	8.8	9.7	8.8	7.7	8.7	11.7	11.6	10.7	7.7	10.2
Agriculture	0.0	13.4	1.7	2.2	4.3	0.0	3.5	4.0	2.2	3.0
Biology	10.6	14.1	9.6	7.2	10.1	12.0	11.5	7.8	11.9	10.5
Botany	0.0	7.6	15.2	15.2	14.1	0.0	0.0	15.0	13.6	11.6
Household science and related	100.0	95.2	82.8	89.3	90.2	100.0	81.2	68.0	78.2	77.8
Veterinary medicine	0.0	0.0	10.4	8.6	9.5	0.0	0.0	7.5	4.8	5.0
Zoology	0.0	13.3	13.0	6.8	10.8	9.0	7.4	10.0	9.2	8.7
Sub-total biological sciences	22.4	18.2	13.8	16.2	16.2	24.4	13.0	15.0	15.9	15.7
Architecture	0.0	2.2	0.0	4.6	2.2	0.0	4.5	1.7	6.6	3.8
Chemical engineering	0.0	0.0	1.1	0.0	0.6	0.0	0.0	0.9	0.0	0.4
Civil engineering	0.0	1.2	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.4
Electrical engineering	0.0	0.0	0.8	0.0	0.3	0.0	0.0	1.4	0.0	0.7
Mechanical engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.3
Mining engineering	0.0	0.0	3.4	3.7	1.7	0.0	0.0	2.7	0.0	0.9
Forestry	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.4	0.3
Sub-total applied sciences	0.0	0.4	1.0	1.0	0.7	0.0	0.6	0.8	0.9	0.7
Dentistry	0.0	5.7	4.5	12.8	7.9	11.1	8.7	1.3	14.8	9.2
Medicine	12.5	10.7	9.9	16.7	12.1	6.9	12.9	10.3	11.9	11.1
Nursing	100.0	100.0	97.9	97.5	98.5	95.5	100.0	99.3	99.1	98.7
Pharmacy	12.5	6.6	5.2	4.2	5.7	8.3	11.4	0.0	12.3	10.2
Sub-total health professions	39.7	18.7	24.4	28.0	24.8	25.4	19.7	19.0	22.0	20.6
Mathematics	13.6	7.6	4.1	7.6	7.1	10.6	6.0	3.6	5.2	5.3
Chemistry	8.5	4.9	7.5	5.1	6.4	3.8	6.2	5.8	5.9	5.7
Geology and related	0.0	0.0	0.0	0.0	0.0	2.9	1.0	1.2	0.8	1.4
Physics	2.0	2.7	1.4	1.3	1.7	2.6	4.1	2.7	1.6	3.0
Sub-total physical sciences	7.6	5.4	3.8	4.5	4.8	5.5	4.5	3.5	3.8	4.1
Grand total	14.9	13.1	12.2	13.8	13.2	14.9	12.8	12.3	13.3	13.0

Table 18
Average Age of University Teachers by Region and by Discipline, Selected Years

	1958-59					1963-64				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
Education	38.7	40.0	41.2	40.5	40.4	37.7	38.9	41.0	41.7	40.6
Fine and applied arts	37.9	39.5	38.7	40.2	39.2	39.6	37.6	40.7	39.9	39.8
Classics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
History	35.5	41.9	37.3	40.3	38.5	37.3	37.1	39.3	37.4	38.1
Library and records sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mass media studies	0.0	0.0	44.4	0.0	44.4	0.0	0.0	51.0	0.0	51.0
English	35.9	38.6	39.3	39.0	38.6	36.9	38.3	39.1	37.4	38.0
French	34.6	39.6	40.2	40.4	39.1	38.6	38.4	39.6	39.8	39.2
German	39.5	43.8	41.1	43.1	41.8	39.8	39.0	40.6	42.7	41.1
Spanish	33.0	42.3	40.8	44.5	41.1	34.3	40.5	39.4	42.8	39.5
Other modern languages	45.7	41.3	39.8	40.7	41.1	42.5	40.4	41.4	35.9	40.1
Philosophy	35.9	39.6	38.1	37.4	38.3	38.7	41.5	38.3	37.4	39.3
Religious studies	41.0	41.5	41.6	45.8	41.6	42.5	40.7	43.3	45.7	42.3
Sub-total humanities	36.5	40.2	39.6	39.9	39.3	38.7	39.4	40.2	38.2	39.3
Anthropology	0.0	33.0	35.5	41.7	36.8	37.5	36.8	38.4	40.5	38.4
Commerce, business administration	35.0	33.9	37.1	35.6	35.6	38.3	37.1	38.3	36.1	37.3
Economics	36.9	38.0	37.4	38.3	37.7	36.0	36.2	37.7	39.6	37.7
Geography	57.0	37.7	38.7	36.6	38.3	36.0	35.6	37.8	35.9	36.6
Law	39.2	36.0	36.3	35.4	36.4	41.4	36.0	35.2	35.0	36.0
Political sciences	33.6	36.0	36.1	35.4	35.4	40.5	35.5	35.9	37.0	36.7
Psychology	38.6	39.0	38.3	39.2	38.7	33.8	39.7	37.6	38.8	37.8
Social work	0.0	43.1	43.1	44.5	43.5	0.0	43.0	45.8	42.9	43.6
Sociology	43.0	36.4	37.5	38.6	38.4	38.5	38.4	38.5	39.9	38.9
Sub-total social sciences	37.8	37.5	37.9	38.1	37.8	37.7	37.7	37.8	38.3	37.9
Agriculture	38.0	36.8	38.3	38.5	38.2	0.0	39.7	42.1	40.6	40.9
Biology	36.5	40.4	38.6	40.4	39.0	36.8	40.7	39.7	39.9	39.6
Botany	33.0	41.1	41.8	42.2	41.6	32.0	38.9	41.4	40.7	40.4
Household science and related	44.8	37.3	38.7	39.6	39.6	43.4	38.3	40.4	42.8	41.0
Veterinary medicine	0.0	35.0	36.8	42.3	37.1	0.0	0.0	38.8	44.0	39.1
Zoology	40.6	37.9	41.7	38.5	39.8	41.1	42.2	42.3	39.5	41.2
Sub-total biological sciences	39.5	38.5	39.4	39.1	39.2	38.6	40.5	41.1	40.5	40.6
Architecture	0.0	42.5	39.5	38.6	39.4	43.6	46.1	43.1	40.0	42.1
Chemical engineering	38.4	33.9	36.2	35.4	35.9	39.0	34.9	36.4	37.1	36.6
Civil engineering	38.7	38.9	38.5	37.4	38.0	38.2	39.3	37.7	39.2	38.6
Electrical engineering	33.5	38.1	37.5	36.0	36.7	34.8	36.2	38.3	38.4	37.4
Mechanical engineering	35.9	35.2	36.8	37.0	36.2	37.8	36.6	39.4	37.6	37.9
Mining engineering	43.3	40.5	41.1	38.4	40.0	45.2	40.0	41.8	41.8	41.5
Forestry	39.3	39.4	36.9	42.0	39.4	40.0	39.6	39.5	43.8	40.6
Sub-total applied sciences	36.6	37.6	37.4	37.6	37.4	38.2	37.8	38.4	39.3	38.5
Dentistry	35.3	38.5	40.2	42.6	39.6	41.0	40.8	48.2	40.9	42.6
Medicine	40.1	41.7	41.2	39.4	40.6	41.8	42.9	42.1	42.0	42.3
Nursing	51.0	37.9	39.8	41.6	40.3	43.5	39.3	42.1	41.3	41.7
Pharmacy	0.0	34.8	40.2	36.1	36.7	27.8	37.6	43.1	38.6	38.1
Sub-total health professions	39.8	40.6	40.8	39.4	40.2	40.6	42.0	42.7	41.4	41.9
Mathematics	35.5	38.7	36.7	37.4	37.4	36.6	37.5	37.6	37.8	37.5
Chemistry	38.0	39.4	38.3	36.1	38.0	37.6	40.1	37.9	37.2	38.2
Geology and related	39.0	38.7	39.2	39.0	39.0	41.2	38.2	38.4	39.5	39.2
Physics	35.5	39.3	37.6	36.4	37.4	38.2	38.2	37.8	36.5	37.5
Sub-total physical sciences	36.8	39.1	37.8	36.8	37.8	37.9	38.6	37.8	37.4	37.9
Grand total	37.6	39.3	39.0	38.9	38.9	38.7	39.3	39.7	39.5	39.4

Table 18 (con't)

Average Age of University Teachers by Region and by Discipline, Selected Years

	1968-69					1973-74				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
Education	35.7	38.3	39.5	41.8	40.0	38.8	38.1	40.7	42.8	40.8
Fine and applied arts	39.7	40.2	39.0	39.9	39.7	39.1	40.3	39.6	40.3	39.9
Classics	0.0	0.0	0.0	0.0	0.0	44.2	42.7	40.4	42.6	41.5
History	36.7	36.4	38.3	37.3	37.5	38.9	38.2	39.8	39.7	39.4
Library and records sciences	0.0	0.0	0.0	0.0	0.0	45.0	42.8	45.0	45.7	44.8
Mass media studies	0.0	40.0	41.2	0.0	41.1	0.0	39.3	43.4	35.9	40.7
English	37.7	38.1	37.1	37.6	37.5	40.1	42.3	40.1	41.0	40.6
French	36.9	36.9	36.5	40.3	37.3	38.2	40.1	40.9	41.7	40.6
German	38.0	37.5	38.2	40.8	38.8	40.1	38.9	42.2	41.0	41.3
Spanish	34.8	40.6	35.4	30.7	35.9	40.5	43.1	40.7	37.4	40.6
Other modern languages	36.8	39.3	39.0	37.9	38.7	38.9	39.0	40.8	40.9	40.7
Philosophy	36.2	38.8	37.1	36.8	37.3	38.5	41.6	40.3	38.5	40.9
Religious studies	38.2	40.9	43.2	44.8	41.6	41.1	41.9	43.7	46.5	43.6
Sub-total humanities	37.3	38.4	38.0	38.1	38.0	39.6	40.3	40.8	40.7	40.5
Anthropology	28.7	38.2	38.8	37.2	37.4	34.2	38.9	38.7	39.6	38.6
Commerce, business administration	37.7	36.6	37.7	36.3	37.0	36.6	36.3	38.8	37.4	37.4
Economics	36.5	36.7	35.9	37.5	36.6	38.9	38.5	37.7	38.9	38.3
Geography	32.3	36.2	36.8	36.6	36.5	35.2	36.5	37.8	37.9	37.4
Law	36.6	35.5	35.4	33.7	35.2	37.2	34.5	36.4	34.3	35.5
Political sciences	35.3	35.9	36.1	35.7	35.9	37.9	38.0	38.2	37.4	38.0
Psychology	34.7	37.6	35.8	37.0	36.4	34.3	37.6	37.6	37.8	37.2
Social work	36.8	43.5	45.6	42.9	43.7	42.0	38.5	45.2	43.1	42.6
Sociology	34.7	34.5	37.4	36.8	36.2	36.2	36.6	38.9	39.0	38.1
Sub-total social sciences	35.7	36.7	36.9	37.3	36.9	36.6	37.3	38.4	38.4	37.9
Agriculture	40.7	42.1	43.5	40.8	42.0	26.0	44.1	43.9	43.0	43.6
Biology	38.3	41.2	38.9	38.2	39.1	39.9	42.0	40.9	39.3	40.6
Botany	37.0	39.2	39.7	40.7	39.9	39.5	41.0	41.4	39.8	40.6
Household science and related	44.3	45.0	41.4	40.1	41.8	41.6	43.8	41.2	39.6	41.0
Veterinary medicine	0.0	41.8	39.3	34.1	38.1	0.0	33.5	42.2	35.0	37.2
Zoology	41.5	41.5	41.8	39.5	41.0	42.2	39.8	40.0	40.3	40.1
Sub-total biological sciences	39.6	41.6	40.9	39.4	40.5	40.2	41.2	41.4	40.2	40.8
Architecture	42.8	39.3	42.0	38.9	40.2	39.2	38.5	41.7	40.6	40.1
Chemical engineering	35.9	37.5	39.3	37.1	38.3	38.9	38.7	42.3	39.4	40.5
Civil engineering	38.0	39.0	39.7	40.8	39.8	41.0	36.9	41.7	42.8	41.1
Electrical engineering	34.8	35.8	38.6	37.1	37.1	37.6	0.0	40.7	40.7	40.2
Mechanical engineering	37.9	39.7	37.8	38.6	38.5	41.3	40.3	40.9	41.6	40.9
Mining engineering	39.1	41.0	42.7	42.7	41.7	42.6	38.1	44.7	46.4	41.3
Forestry	42.3	42.5	40.1	41.2	41.5	39.4	38.9	41.7	41.5	40.2
Sub-total applied sciences	37.5	38.6	38.7	39.3	38.7	39.7	38.7	41.6	41.4	40.6
Dentistry	41.3	41.4	45.4	41.0	42.3	40.3	40.8	44.9	39.4	41.4
Medicine	42.1	40.3	41.0	41.9	41.0	41.5	41.5	42.0	41.9	41.6
Nursing	36.6	36.7	41.0	37.6	38.4	39.8	37.8	40.2	38.1	39.1
Pharmacy	37.0	37.1	40.3	39.2	38.5	35.2	40.1	45.1	41.1	40.3
Sub-total health professions	39.9	39.8	41.3	40.9	40.6	40.8	41.1	42.0	41.2	41.1
Mathematics	35.9	36.6	36.9	36.1	36.5	35.9	37.7	38.3	38.0	37.8
Chemistry	36.8	38.4	37.3	37.4	37.5	37.4	41.6	39.7	39.6	39.6
Geology and related	39.6	38.2	39.5	40.3	39.6	40.5	39.0	40.7	40.1	40.1
Physics	36.9	37.7	37.8	37.6	37.6	37.8	38.1	39.2	38.9	38.6
Sub-total physical sciences	36.9	37.6	37.5	37.3	37.4	37.5	39.0	39.2	38.9	38.5
Grand total	37.5	38.7	38.6	39.1	38.6	38.8	39.3	40.3	40.5	40.6

Academic Rank Distribution by Discipline

Table 19 shows academic rank distribution among disciplines for four selected years. To some extent, rank is a function of age. In 1958-59, 49.8% were at the two senior ranks (full professor and associate professor); the percentage declined to 45.6% in 1963-64, but rose to 53.0% in 1973-74.

By discipline, in 1973-74, more than one-quarter of all applied sciences faculty, except architecture, were full professors (from 26.6% in forestry to 38.0% in chemical engineering). But in the humanities, only classics, religion and philosophy had similarly high percentages of full professors. Most of the humanities and social sciences had much larger proportions of teachers at the ranks of lecturer and instructor than did the sciences. The disciplines with the smallest proportions of full professors were those traditionally regarded as female preserves: nursing (3.9%) and household science (9.6%).

Salary Structure by Discipline

Table 20 shows that teachers in the Atlantic provinces had salaries substantially lower than the national average. Similarly, the average salary at Quebec universities has also been slightly below average, whereas salaries in the Western provinces and Ontario have been above average.

Table 19

- 49 -

Percentage Distribution of University Teachers by Rank and by Discipline, Selected Years

	1958-59					1963-64				
	Professors	Associate professors	Assistant professors	Lecturers and instructors	Others	Professors	Associate professors	Assistant professors	Lecturers and instructors	Others
	per cent									
Education	20.4	25.9	27.5	23.5	2.8	14.3	24.5	31.3	29.1	0.9
Fine and applied arts	20.6	26.8	12.4	36.1	4.1	12.8	26.2	33.5	25.6	1.8
Classics	29.0	18.3	22.1	16.8	13.7	23.6	18.3	22.0	23.0	13.1
History	25.5	19.9	33.3	12.8	8.5	17.5	21.5	34.0	21.9	5.1
Library and records science ...	10.0	30.0	50.0	10.0	0.0	20.0	20.0	24.0	36.0	0.0
Mass media studies	40.0	20.0	40.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0
English	21.4	17.9	27.8	25.9	7.0	14.5	18.8	30.4	33.0	3.2
French	18.9	14.3	24.6	22.3	20.0	14.2	15.7	26.6	31.1	12.4
German	26.7	20.0	33.3	20.0	0.0	17.1	25.7	28.6	27.1	1.4
Spanish	13.3	6.7	46.7	33.3	0.0	10.7	10.7	35.7	42.9	0.0
Other modern languages	22.0	17.1	32.9	26.8	1.2	11.4	16.4	33.6	35.9	2.7
Philosophy	26.0	15.5	21.5	21.0	16.0	21.2	20.3	30.1	18.4	10.1
Religious studies	32.4	28.1	20.1	10.8	8.6	29.1	17.7	21.7	24.0	7.4
Sub-total humanities	24.3	18.4	26.6	20.2	10.4	17.6	18.7	29.1	27.9	6.8
Anthropology	16.7	25.0	25.0	33.3	.0	16.7	26.7	40.0	16.7	0.0
Commerce, business administra- tion	19.1	22.1	31.6	19.1	8.1	16.7	27.5	41.0	14.9	0.0
Economics	28.0	28.0	23.4	19.4	1.1	23.9	24.9	29.0	19.5	2.7
Geography	21.2	19.2	36.5	23.1	0.0	17.9	22.4	39.6	18.7	1.5
Law	40.8	19.7	21.1	18.4	0.0	28.6	22.6	36.8	11.3	0.8
Political science	12.1	27.3	45.5	15.2	0.0	16.4	19.8	30.2	32.8	0.9
Psychology	19.6	29.9	29.0	19.6	1.9	14.9	28.4	42.8	14.0	0.0
Social work	21.8	20.0	47.3	10.9	0.0	12.5	25.0	28.1	34.4	0.0
Sociology	10.0	20.0	55.0	10.0	5.0	10.2	34.3	37.0	16.7	1.9
Sub-total social sciences ...	23.0	24.7	30.1	18.2	3.9	18.2	25.3	35.5	19.9	1.2
Agriculture	27.6	26.7	31.0	14.8	0.0	25.4	35.3	35.3	3.9	0.0
Biology	28.7	20.8	34.7	10.9	5.0	23.5	28.1	31.3	11.1	6.0
Botany	31.7	28.6	28.6	11.1	0.0	27.9	18.6	37.2	16.3	0.0
Household science and related	9.6	24.1	41.0	25.3	0.0	10.6	19.2	31.7	38.5	0.0
Veterinary medicine	30.6	30.6	28.6	10.2	0.0	21.6	39.2	39.2	0.0	0.0
Zoology	30.8	24.2	30.3	14.2	0.5	26.8	30.5	32.8	9.6	0.3
Sub-total biological sciences	27.2	25.2	32.1	14.6	0.8	23.9	29.3	33.7	11.7	1.4
Architecture	16.7	31.3	37.5	14.6	0.0	22.4	20.9	55.2	1.5	0.0
Chemical engineering	23.4	23.4	42.6	10.6	0.0	17.9	32.1	39.7	10.3	0.0
Civil engineering	21.5	26.7	38.5	12.6	0.7	15.1	34.2	32.9	17.8	0.0
Electrical engineering	22.9	22.9	34.4	17.7	2.1	19.9	24.3	35.4	20.4	0.0
Mechanical engineering	14.2	23.0	32.7	24.8	5.3	14.7	24.9	40.1	19.2	1.1
Mining engineering	51.9	18.5	25.9	3.7	0.0	44.0	29.3	25.3	1.3	0.0
Forestry	39.3	25.0	21.4	14.3	0.0	20.0	37.5	30.0	12.5	0.0
Sub-total applied sciences ..	22.9	24.4	34.9	16.2	1.6	19.2	28.4	35.9	16.3	0.2
Dentistry	44.7	28.9	15.8	5.3	5.3	32.9	36.7	25.3	5.1	0.0
Medicine	37.1	22.4	24.1	16.3	0.0	29.3	24.4	28.7	17.5	0.2
Nursing	9.7	12.9	40.3	37.1	0.0	5.1	20.2	25.3	49.5	0.0
Pharmacy	16.1	22.6	48.4	12.9	0.0	15.3	23.7	44.1	16.9	0.0
Sub-total health professions	32.2	21.6	27.5	18.1	0.5	25.1	25.1	29.1	20.5	0.1
Mathematics	23.5	22.5	28.7	16.9	8.5	18.1	25.0	32.4	19.9	4.7
Chemistry	27.9	26.9	28.9	12.1	4.3	23.2	28.4	37.7	8.5	2.1
Geology and related	33.7	19.4	35.7	8.2	3.1	23.2	32.0	36.8	8.0	0.0
Physics	27.4	25.8	28.6	12.9	5.2	22.9	26.6	32.9	13.7	3.9
Sub-total physical sciences	26.8	24.4	29.1	13.4	6.3	21.4	27.2	34.3	13.6	3.4
Total	27.5	22.3	28.2	17.2	4.7	21.5	24.1	31.8	19.8	2.8

Table 19 (con't)

Percentage Distribution of University Teachers by Rank and by Discipline, Selected Years

	1968-69					1973-74				
	Professors	Associate professors	Assistant professors	Lecturers and instructors	Others	Professors	Associate professors	Assistant professors	Lecturers and instructors	Others
	per cent									
Education	11.3	26.7	38.4	22.1	1.5	12.8	29.7	37.9	16.0	3.6
Fine and applied arts	12.1	21.6	40.2	23.1	3.0	11.8	28.4	37.9	19.3	2.7
Classics	19.5	26.0	38.6	14.1	1.8	27.8	29.8	34.9	5.9	1.6
History	17.1	22.2	40.2	18.6	1.9	19.3	33.2	36.1	9.5	1.9
Library and records science ..	21.0	38.7	27.4	12.9	0.0	18.2	39.8	30.7	11.4	0.0
Mass media studies	10.0	30.0	60.0	0.0	0.0	12.7	34.2	38.0	13.9	1.3
English	13.4	20.1	36.1	29.5	0.9	18.1	30.9	37.3	13.0	0.7
French	10.7	15.5	35.0	36.0	2.8	13.7	28.4	35.7	20.9	1.4
German	13.8	21.4	35.2	26.2	3.4	16.4	29.1	40.8	13.6	0.0
Spanish	3.6	19.0	34.5	39.3	3.6	10.1	26.2	45.6	18.1	0.0
Other modern languages	11.8	19.4	40.5	26.7	1.6	16.6	27.5	34.8	18.2	3.0
Philosophy	15.9	21.5	39.4	21.1	2.0	24.6	30.4	35.4	7.6	2.0
Religious studies	21.8	25.1	30.0	21.8	1.2	29.1	26.3	29.5	11.6	3.5
Sub-total humanities	14.5	20.8	37.2	25.8	1.8	19.3	30.1	35.9	13.1	1.7
Anthropology	12.6	26.1	47.7	11.7	1.8	17.2	30.9	35.7	15.6	0.6
Commerce, business administra-										
tion	16.7	26.0	37.3	19.0	1.0	16.5	31.0	35.5	13.3	3.6
Economics	19.5	24.5	41.5	13.3	1.2	24.7	29.2	35.0	9.7	1.4
Geography	17.5	25.6	39.4	15.2	2.3	18.9	29.8	36.7	12.7	1.9
Law	29.2	26.5	40.2	3.4	0.7	33.9	29.7	32.2	4.0	0.2
Political science	18.4	21.4	43.7	15.9	0.5	21.7	28.5	36.5	13.1	0.2
Psychology	15.7	25.9	43.8	13.3	1.3	17.2	30.5	39.3	10.8	2.2
Social work	12.5	29.6	38.8	19.1	0.0	11.3	34.3	44.5	9.9	0.0
Sociology	12.7	20.7	40.8	24.8	1.0	16.0	21.9	41.6	18.2	2.2
Sub-total social sciences ..	17.5	24.5	41.1	15.6	1.3	19.8	29.2	37.3	12.0	1.7
Agriculture	26.3	35.9	32.2	5.6	0.0	37.4	33.2	23.5	5.3	0.6
Biology	21.3	31.1	38.0	7.6	2.0	27.0	34.5	30.4	6.3	1.8
Botany	27.6	28.4	35.1	9.0	0.0	50.5	32.9	28.1	8.4	0.0
Household science and related	4.9	22.4	46.9	25.2	0.7	9.6	34.6	34.6	19.7	1.4
Veterinary medicine	21.3	26.6	24.5	27.7	0.0	22.0	30.5	31.4	15.3	0.8
Zoology	26.6	31.1	32.8	9.1	0.4	31.0	30.7	28.9	9.0	0.4
Sub-total biological sciences	23.0	30.8	35.1	10.3	0.8	27.6	32.7	29.6	8.6	1.6
Architecture	17.0	36.3	40.0	6.7	0.0	13.2	36.8	44.0	4.9	1.1
Chemical engineering	28.3	39.2	24.7	6.6	1.2	38.0	32.5	20.9	3.4	5.1
Civil engineering	19.3	39.0	32.6	7.7	1.4	28.3	44.8	22.5	3.7	0.7
Electrical engineering	18.0	32.5	39.2	8.7	1.6	31.7	43.5	19.4	5.0	0.4
Mechanical engineering	20.4	38.0	31.2	9.3	1.1	31.8	43.3	19.6	4.0	1.2
Mining engineering ..	35.1	35.1	23.7	4.4	1.8	32.1	42.5	20.8	4.7	0.0
Forestry	38.8	19.4	31.3	10.4	0.0	26.6	30.4	30.4	11.4	1.3
Sub-total applied sciences ..	21.5	34.9	34.6	8.0	1.0	27.7	40.5	24.9	5.1	1.9
Dentistry	31.1	34.8	29.3	4.9	0.0	31.1	32.7	30.3	5.6	0.4
Medicine	22.2	23.2	31.6	15.0	8.0	24.3	29.5	35.6	9.1	1.5
Nursing	3.9	10.7	31.7	53.7	0.0	3.9	12.7	39.1	43.5	0.7
Pharmacy	23.1	26.0	37.5	12.5	1.0	26.3	35.8	24.8	11.7	1.5
Sub-total health professions	20.2	22.4	31.7	20.0	5.6	22.5	28.1	35.1	12.9	1.4
Mathematics	16.5	26.8	40.3	14.6	1.9	19.9	37.3	35.9	6.3	0.6
Chemistry	24.8	28.3	37.7	7.0	2.2	32.8	34.6	23.5	6.7	2.4
Geology and related	24.5	38.0	30.2	6.9	0.4	31.4	38.2	23.2	4.9	2.3
Physics	23.2	30.4	37.1	8.2	1.1	30.5	35.9	26.2	4.1	3.7
Sub-total physical sciences	21.8	28.9	37.8	9.9	1.6	25.8	35.2	29.5	6.7	2.8
Total	19.4	25.4	36.6	16.7	1.8	22.1	30.9	33.6	11.3	2.1

Table 20

Average Salary of University Teachers by Discipline and by Region, Selected years

	1958-59					1963-64				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
	dollars									
Education	5,700	6,153	7,855	7,463	7,201	7,415	8,479	9,607	9,184	8,988
Fine and applied arts	4,593	6,012	7,602	7,059	6,682	6,732	8,514	9,136	8,648	8,409
Classics	0	0	0	0	0	0	0	0	0	0
History	5,696	6,584	7,682	7,517	7,188	7,220	8,045	9,207	8,329	8,478
Library and records sciences	0	0	0	0	0	0	0	0	0	0
Mass media studies	0	0	8,460	0	8,460	0	0	11,025	0	11,025
English	5,295	5,633	7,331	6,969	6,703	7,351	7,851	9,043	7,982	8,225
French	4,681	5,892	7,262	6,732	6,480	6,998	8,011	8,698	7,994	8,114
German	5,636	6,437	7,966	6,965	7,164	7,033	9,620	9,130	8,564	8,604
Spanish	5,050	5,866	7,526	6,250	6,452	6,242	9,170	6,900	8,400	7,621
Other modern languages	5,240	6,002	7,316	6,904	6,677	7,908	8,014	8,632	7,093	8,088
Philosophy	5,830	6,766	7,283	7,397	7,040	7,813	9,233	8,906	8,782	8,837
Religious studies	4,987	6,540	8,078	6,125	7,100	7,705	8,014	9,950	9,450	9,028
Sub-total humanities	5,377	6,221	7,517	7,059	6,868	7,387	8,224	9,076	8,139	8,428
Anthropology	0	6,200	7,000	8,833	7,391	9,500	8,271	9,418	9,831	9,221
Commerce and business administration	5,513	6,495	7,784	7,378	7,136	7,959	9,307	9,612	8,830	8,128
Economics	5,603	7,159	7,903	7,900	7,560	7,786	9,017	9,668	9,615	9,314
Geography	5,700	6,970	7,180	7,307	7,125	7,966	8,771	9,430	8,496	8,942
Law	8,120	7,788	8,180	8,112	8,044	10,329	10,361	10,018	9,571	10,051
Political science	5,230	6,333	6,485	7,007	6,502	8,081	8,252	8,649	8,506	8,464
Psychology	5,666	6,347	7,058	7,131	6,823	7,556	10,130	9,107	9,078	9,088
Social work	0	6,337	8,429	6,926	7,191	0	8,852	10,188	8,112	8,876
Sociology	6,166	6,100	6,710	6,742	6,369	6,920	9,403	8,789	9,174	8,835
Sub-total social sciences	6,013	6,711	7,650	7,421	7,212	8,088	9,230	9,404	8,915	9,105
Agriculture	4,800	7,184	7,266	8,333	7,654	0	9,944	10,161	10,245	10,149
Biology	5,890	7,024	7,101	8,325	7,042	7,692	10,006	9,773	9,524	9,473
Botany	6,500	7,054	8,127	7,568	7,742	8,250	9,092	9,828	9,519	9,550
Household science and related	5,025	6,310	6,470	6,590	6,337	7,857	8,186	7,766	8,501	8,139
Veterinary medicine	0	6,500	7,436	8,400	7,476	0	0	10,018	10,933	10,072
Zoology	6,460	7,750	8,588	8,299	8,161	9,731	11,632	10,427	10,483	10,630
Sub-total biological sciences	5,891	7,282	7,665	8,011	7,589	8,303	10,213	9,926	9,987	9,908
Architecture	0	7,200	7,713	7,482	7,538	9,510	9,977	9,757	9,600	9,702
Chemical engineering	6,456	6,800	7,887	8,290	7,635	8,730	9,924	9,433	10,746	9,635
Civil engineering	6,751	6,852	8,036	7,465	7,448	8,207	9,414	8,837	9,469	9,123
Electrical engineering	6,210	7,260	7,903	7,483	7,392	8,315	9,369	9,276	9,581	9,262
Mechanical engineering	6,078	6,097	7,131	7,495	6,762	8,068	8,980	9,452	9,442	9,183
Mining engineering	6,240	7,980	9,748	8,521	8,585	9,150	10,981	11,182	11,300	11,029
Forestry	7,614	6,170	8,687	8,275	7,851	9,000	9,040	10,418	9,655	9,547
Sub-total applied sciences	6,262	6,735	7,828	7,665	7,368	8,277	9,335	9,413	9,756	9,360
Dentistry	7,262	7,800	10,250	8,757	8,822	9,656	11,687	13,469	10,609	11,437
Medicine	9,044	8,135	10,130	8,841	9,102	11,990	11,519	11,439	10,737	11,263
Nursing	5,300	5,522	6,131	6,468	6,132	7,130	7,209	7,483	7,360	7,373
Pharmacy	0	6,650	8,842	7,155	7,400	7,300	9,453	10,550	9,100	9,264
Sub-total health professions	8,641	7,789	9,273	8,293	8,535	10,138	11,093	10,801	10,065	10,570
Mathematics	5,571	6,363	7,901	7,302	6,984	7,620	8,773	9,614	8,941	8,998
Chemistry	6,629	7,264	8,402	7,460	7,629	8,628	9,860	10,033	9,529	9,686
Geology and related	6,232	6,946	7,953	7,888	7,448	8,369	9,507	9,687	10,211	9,492
Physics	5,808	7,472	8,018	7,587	7,523	8,334	9,366	9,895	9,392	9,467
Sub-total physical sciences	6,052	6,931	8,101	7,504	7,384	8,238	9,334	9,830	9,372	9,397
Grand total	6,077	6,951	8,012	7,717	7,492	8,101	9,368	9,742	9,342	9,367

Average Salary of University Teachers by Discipline and by Region, Selected years

	1968-69					1973-74				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
	dollars									
Education	10,654	11,536	13,641	13,101	12,764	14,953	15,518	19,319	18,266	17,632
Fine and applied arts	9,956	11,847	12,079	11,948	11,762	13,630	15,240	15,717	16,135	15,513
Classics	0	0	0	0	0	17,308	17,384	17,750	18,548	17,826
History	10,907	11,667	13,191	12,142	12,339	15,497	16,312	18,178	17,688	17,320
Library and records sciences	0	0	0	0	0	15,967	17,697	18,147	20,137	18,314
Mass media studies	0	15,000	12,655	0	12,890	0	14,833	18,628	15,518	16,829
English	10,563	11,312	12,110	11,420	11,560	15,446	16,402	17,223	17,083	16,814
French	9,555	11,024	11,167	11,077	10,845	14,209	15,751	16,730	16,737	16,099
German	10,070	11,649	11,683	12,104	11,519	15,211	16,227	17,388	16,115	16,597
Spanish	9,781	11,648	10,037	8,662	10,175	14,205	15,982	16,026	16,242	15,738
Other modern languages	9,602	11,698	11,552	12,097	11,661	14,184	16,060	16,873	17,189	16,581
Philosophy	10,649	11,907	12,711	12,186	12,186	15,823	17,961	18,719	17,374	17,934
Religious studies	10,092	11,412	12,914	13,355	11,950	15,026	16,539	16,562	17,416	16,436
Sub-total humanities	10,395	11,542	12,233	11,779	11,746	15,211	16,440	17,431	17,248	16,904
Anthropology	9,500	13,395	13,393	12,415	12,674	14,159	17,247	16,817	17,408	16,834
Commerce and business administration	10,596	12,196	13,987	13,145	12,863	14,676	16,731	19,333	18,516	17,727
Economics	11,597	13,207	13,854	13,313	13,319	16,443	17,718	19,335	18,917	18,563
Geography	9,822	12,084	13,171	12,566	12,664	14,324	15,670	18,220	17,377	17,250
Law	12,814	13,270	14,560	13,152	13,720	19,259	17,788	20,069	18,772	19,007
Political science	11,063	11,437	12,745	12,853	12,408	15,740	16,814	18,392	17,869	17,736
Psychology	11,391	12,428	13,408	12,774	12,865	15,104	16,323	17,703	18,129	17,173
Social work	11,020	12,521	13,842	12,079	12,735	20,545	14,927	19,712	17,456	17,917
Sociology	10,125	10,811	13,118	12,130	11,901	14,620	15,458	17,345	16,878	16,491
Sub-total social sciences	11,128	12,329	13,374	12,830	12,805	15,573	16,623	18,409	18,062	17,607
Agriculture	13,483	14,001	14,183	14,333	14,205	13,200	18,596	19,782	20,227	19,797
Biology	12,076	13,521	13,661	13,446	13,288	16,226	20,670	19,592	17,888	18,767
Botany	12,166	13,793	13,331	14,352	13,700	16,893	17,259	18,924	18,315	18,367
Household science and related	10,034	11,587	11,763	10,948	11,124	13,411	16,464	16,690	16,226	16,087
Veterinary medicine	0	14,400	13,562	11,165	13,011	0	14,979	20,042	16,660	17,567
Zoology	14,879	15,094	15,004	14,069	14,733	17,017	17,209	18,863	19,577	18,391
Sub-total biological sciences	12,176	14,098	14,036	13,525	13,734	15,876	18,339	19,097	18,604	18,468
Architecture	12,527	13,117	13,231	12,841	13,023	16,612	16,632	17,839	18,505	17,474
Chemical engineering	12,346	14,236	14,839	15,200	14,578	18,023	18,456	21,214	21,058	20,231
Civil engineering	11,751	13,414	13,840	14,364	13,726	17,957	17,406	20,714	19,813	19,512
Electrical engineering	11,693	12,962	14,015	13,608	13,403	17,579	0	19,876	19,885	19,600
Mechanical engineering	11,334	13,771	13,874	14,060	13,685	17,403	18,195	20,887	20,273	19,629
Mining engineering	11,555	14,934	16,101	15,495	15,097	18,050	18,180	22,699	21,081	19,943
Forestry	12,507	14,315	12,308	14,243	13,408	17,044	17,896	19,524	19,078	18,434
Sub-total applied sciences	11,700	13,609	14,007	14,136	13,694	17,423	17,817	20,259	19,852	19,175
Dentistry	15,833	14,891	19,101	14,683	16,018	21,989	20,529	25,037	21,073	22,201
Medicine	16,461	14,940	16,957	15,289	15,783	23,532	20,015	21,387	23,323	21,745
Nursing	8,086	9,270	10,553	9,202	9,509	12,779	13,146	13,872	13,057	13,333
Pharmacy	12,437	13,740	14,276	13,564	13,658	16,016	17,807	22,466	19,070	18,873
Sub-total health professions	13,472	14,331	15,938	14,073	14,073	20,961	19,454	20,803	21,740	20,764
Mathematics	10,736	11,988	13,693	12,745	12,670	15,245	16,717	18,946	18,166	18,016
Chemistry	12,112	13,431	14,155	13,923	13,664	16,754	19,313	20,536	19,531	19,449
Geology and related	12,563	13,101	14,175	14,328	13,781	17,700	17,909	19,790	20,008	19,108
Physics	11,792	13,107	14,512	13,901	13,691	16,058	17,331	19,965	18,929	18,383
Sub-total physical sciences	11,684	12,815	14,102	13,576	13,352	16,209	17,832	19,738	18,949	18,618
Grand total	11,388	12,894	13,700	13,225	13,141	16,428	17,461	19,088	18,900	18,369

In 1973-74 full-time teachers in the Atlantic provinces earned an average of \$16,428; the Quebec equivalent was \$17,462; \$19,088 in Ontario, and \$18,900 in the Western provinces. By discipline, the national average was \$18,369, ranging from a low of \$15,513 in fine and applied arts, to a high of \$22,201 in dentistry. In the humanities, the highest average salary was \$18,314 in library science. Law was the most lucrative field in the social sciences (\$19,007), though it lagged behind highs in the biological sciences (agriculture - \$19,797); applied sciences (chemical engineering - \$20,231); and physical sciences (chemistry - \$19,449). Most social science teachers earned more than \$17,000, while the average salary in engineering disciplines exceeded \$19,000.

With 1970-71 as a base, salary was also expressed in index form so it could be compared with the Consumer Price Index (Table 21). The salary index increased from 100 in 1971-72 to 134.0 in 1974-75, while the Consumer Price Index rose to 125.0 in 1974 and 138.5 in 1975. The increase in the salary index was particularly marked between 1973-74 and 1974-75: from 120.1 to 134.0. Only slight variations occurred among disciplines, the lowest being religious studies (125.0) and the highest electrical engineering (145.0). Most other disciplines were very close to the national average. The salary index was also developed for the years preceding 1970-71 to show former variations.

Table 21

Salary Index (1970-71 = 100) of University Teachers by Discipline, 1956-57 to 1974-75

	1956-57	1957-58*	1958-59	1959-60*	1960-61	1961-62*	1962-63	1963-64	1964-65*
Physical education	38.2	44.4	50.6	53.4	56.2	57.8	59.4	61.5	64.9
Education	39.6	44.1	48.5	51.8	55.1	56.6	58.2	60.5	64.5
Sub-total education	38.0	43.0	48.0	51.4	54.7	56.3	57.9	60.0	63.8
Music	36.1	42.2	48.3	49.6	50.9	55.6	60.3	63.6	66.4
Fine and applied arts	37.4	44.7	52.0	56.7	61.4	62.1	62.9	63.0	68.9
Sub-total fine and applied arts	36.9	43.6	50.3	53.1	56.0	58.8	61.7	63.3	67.7
Classics	40.3	0	0	0	0	0	0	0	0
History	39.6	45.1	50.6	53.5	56.4	57.2	58.0	59.7	63.3
Library and Records sciences	34.0	0	0	0	0	0	0	0	0
Mass media studies	41.0	50.0	59.0	63.4	68.0	71.0	74.1	76.8	76.9
English	40.0	45.0	49.3	52.1	55.0	57.0	59.0	61.0	63.2
French	40.3	45.0	50.0	53.3	57.0	59.1	61.3	62.2	65.0
Other modern languages	40.0	45.0	50.0	54.0	57.1	58.4	60.0	61.0	66.0
Philosophy	39.2	43.2	47.3	51.0	54.0	55.0	56.2	59.3	62.1
Religious studies	42.3	47.0	51.0	55.0	58.3	60.0	61.0	65.0	66.0
Sub-total humanities	40.1	45.0	50.0	53.0	56.0	57.4	59.0	61.0	64.0
Anthropology	35.3	43.1	51.0	54.3	58.0	60.1	62.4	64.0	67.0
Area studies	38.0	42.4	47.0	49.1	51.3	55.0	58.4	60.0	64.0
Commerce, business administration	40.0	44.0	48.0	52.0	56.0	58.2	61.0	61.3	65.0
Economics	38.1	44.0	49.0	52.4	56.0	57.0	58.2	60.4	64.1
Geography	37.2	44.0	50.3	54.0	57.0	59.0	60.4	63.2	67.0
Law	43.0	46.4	50.2	54.0	57.2	58.3	60.0	63.0	66.0
Political sciences	34.0	39.3	45.0	50.0	55.0	57.0	59.0	58.1	62.0
Psychology	38.2	43.0	47.1	52.0	57.0	59.4	62.0	63.0	66.0
Social work	39.0	44.3	50.0	53.4	57.0	59.0	61.1	62.0	65.4
Sociology	38.2	42.2	46.3	52.0	57.3	60.0	62.4	64.2	67.0
Sub-total sciences	39.3	44.2	49.1	53.0	57.0	59.0	61.0	62.0	66.0
Agriculture	35.2	41.0	47.0	51.4	56.2	58.1	60.0	62.0	65.4
Biology	34.3	40.2	46.2	51.1	56.1	58.0	60.0	62.1	64.4
Botany	34.0	41.2	49.0	53.4	58.2	59.0	59.4	60.0	63.1
Household science and related	37.0	43.0	48.3	52.0	55.3	58.0	60.0	62.0	65.1
Veterinary medicine and science	36.0	43.0	49.3	54.0	59.0	61.2	64.0	67.0	70.1
Zoology	35.2	43.0	51.0	55.1	60.0	61.4	63.4	66.0	69.2
Sub-total biological science	36.0	42.3	49.0	54.0	58.0	60.0	62.0	64.0	67.0
Architecture	42.0	47.0	53.0	57.0	61.0	63.0	65.0	68.0	71.0
Chemical engineering	34.0	39.4	45.1	48.0	51.0	53.0	54.4	57.0	62.1
Civil engineering	35.3	41.0	46.4	49.2	52.0	54.0	55.0	57.0	62.0
Electrical engineering	37.2	43.0	49.0	51.1	54.0	56.0	58.1	61.0	65.0
Mechanical engineering	32.4	37.3	42.2	46.2	50.1	53.0	55.2	57.3	62.0
Mining engineering	36.0	43.0	50.0	53.2	57.0	59.0	61.0	64.0	67.0
Forestry	43.0	47.0	51.0	54.0	57.0	59.0	60.2	62.0	67.1
Other applied sciences									
Sub-total applied sciences	36.0	41.1	46.4	50.0	53.0	55.0	57.0	59.0	63.3
Dentistry	26.3	37.3	48.3	52.0	55.4	58.5	62.0	63.0	67.0
Medicine	32.0	41.0	49.0	52.1	55.1	57.1	59.1	61.0	64.0
Nursing	44.4	50.0	55.0	59.0	63.0	64.0	65.0	66.1	68.4
Pharmacy	39.0	44.0	48.4	52.4	56.3	58.4	60.4	61.0	65.0
Sub-total health professions	33.0	41.0	49.0	52.0	55.0	57.0	59.0	60.1	63.0
Mathematics	37.2	42.0	47.0	50.3	54.0	56.2	58.3	60.1	64.0
Chemistry	35.3	42.0	48.0	52.0	56.0	57.3	59.0	61.0	64.7
Geology and related	34.0	40.0	47.0	51.0	55.0	56.4	58.2	59.2	63.0
Physics	36.0	42.0	48.0	52.0	55.1	57.0	58.0	60.4	64.4
Sub-total physical sciences	36.1	42.0	48.0	51.4	55.3	57.0	59.0	61.0	64.1
Grand total	37.4	43.2	49.0	53.0	56.1	58.6	60.0	61.2	65.0

* Derived through interpolation.

Salary Index (1970-71 = 100) of University Teachers by Discipline, 1956-57 to 1974-75

	1965-66	1966-67*	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
Physical education	68.4	73.6	78.8	85.0	92.8	100.0	105.1	112.3	120.7	134.7
Education	68.6	74.5	80.5	86.7	92.2	100.0	105.6	111.2	118.1	132.8
Sub-total education	67.6	73.3	79.1	85.1	91.1	100.0	104.6	110.5	117.6	131.9
Music	69.1	75.2	81.3	87.2	94.2	100.0	102.4	110.2	117.9	130.5
Fine and applied arts	74.7	79.5	84.2	89.6	94.8	100.0	104.3	108.6	116.0	128.4
Sub-total fine and applied arts	72.1	77.5	82.9	88.6	94.6	100.0	103.5	109.2	116.8	129.2
Classics	0	0	0	0	91.8	100.0	109.8	114.9	122.5	0
History	66.9	73.6	80.3	86.8	94.3	100.0	107.7	113.9	121.9	136.8
Library and Records sciences	0	0	0	0	92.7	100.0	101.3	109.0	117.7	0
Mass media studies	77.0	79.4	82.0	90.0	101.0	100.0	105.1	108.3	117.2	140.0
English	66.0	72.0	78.0	85.0	93.0	100.0	108.2	115.1	124.0	138.3
French	67.0	73.0	79.0	83.2	92.1	100.0	107.0	114.0	124.0	137.4
Other modern languages	71.0	76.3	82.0	87.4	94.0	100.0	109.0	115.0	124.2	138.0
Philosophy	65.0	70.4	76.0	82.0	91.1	100.0	105.0	112.0	121.0	133.4
Religious studies	67.2	72.3	77.4	86.0	93.2	100.0	104.0	108.3	118.0	125.0
Sub-total humanities	67.0	73.0	79.0	85.0	93.0	100.0	107.1	114.0	122.3	136.0
Anthropology	70.0	76.1	82.4	87.3	95.2	100.0	103.2	108.0	116.0	128.0
Area studies	68.0	74.0	80.2	85.0	91.0	100.0	110.1	113.2	120.3	137.1
Commerce, business administration	69.0	75.1	82.0	86.4	93.4	100.0	106.4	114.0	119.1	133.0
Economics	68.0	74.0	80.3	86.4	92.4	100.0	106.0	113.0	121.0	133.3
Geography	71.0	77.2	84.0	90.0	95.2	100.0	107.0	113.0	122.0	136.2
Law	69.0	75.0	81.0	86.0	92.2	100.0	108.0	111.0	119.0	135.0
Political sciences	66.0	74.0	81.1	85.3	92.0	100.0	107.3	114.0	122.0	132.3
Psychology	69.2	76.0	82.1	89.0	97.0	100.0	107.0	112.0	119.0	132.0
Social work	69.0	75.3	82.0	89.0	94.0	100.0	107.1	113.0	125.0	135.0
Sociology	69.4	76.4	83.4	87.0	95.0	100.0	107.0	113.0	120.0	134.0
Sub-total sciences	69.0	75.3	82.0	87.2	94.1	100.0	107.0	113.0	120.0	133.1
Agriculture	69.0	75.0	81.0	87.0	95.3	100.0	107.0	112.0	121.0	139.2
Biology	67.0	74.0	81.0	87.0	95.0	100.0	106.0	115.0	123.1	130.0
Botany	66.4	74.0	81.3	86.0	94.0	100.0	104.2	109.3	115.2	131.4
Household science and related	68.1	74.0	80.0	85.0	95.2	100.0	109.0	114.3	123.0	138.0
Veterinary medicine and science	74.0	78.0	81.2	86.0	94.0	100.0	101.0	107.0	116.0	141.0
Zoology	72.3	78.4	85.0	92.0	98.0	100.0	104.0	106.4	114.2	130.0
Sub-total biological science	70.1	76.2	82.4	89.0	96.0	100.0	105.0	111.0	119.1	133.0
Architecture	73.4	79.1	85.0	91.0	94.0	100.0	107.0	112.0	122.0	143.3
Chemical engineering	67.2	74.0	80.0	86.2	93.1	100.0	106.1	112.1	120.0	140.0
Civil engineering	67.0	74.0	80.2	86.0	94.0	100.0	107.0	113.1	122.0	141.0
Electrical engineering	69.1	76.1	83.0	88.0	96.2	100.0	110.0	122.0	129.0	145.0
Mechanical engineering	66.4	73.0	79.0	85.4	93.0	100.0	106.4	114.4	123.0	139.0
Mining engineering	70.1	76.4	83.0	87.3	94.0	100.0	110.2	111.1	115.3	143.0
Forestry	73.0	77.0	81.0	87.0	92.0	100.0	105.4	111.0	119.3	130.0
Other applied sciences	68.0	74.0	80.4	86.3	93.2	100.0	107.0	113.0	121.0	139.0
Sub-total applied sciences	68.0	74.0	80.4	86.3	93.2	100.0	107.0	113.0	121.0	139.0
Dentistry	71.0	76.0	80.3	88.0	95.0	100.0	108.1	115.0	122.0	140.0
Medicine	66.3	73.0	79.0	85.0	93.0	100.0	107.0	112.1	117.1	132.4
Nursing	71.0	76.0	81.0	85.2	92.4	100.0	107.1	113.3	120.0	138.0
Pharmacy	69.4	76.4	84.0	89.4	99.0	100.0	110.0	116.0	124.0	139.0
Sub-total health professions	66.0	72.0	78.1	84.0	91.0	100.0	108.0	113.0	118.1	132.0
Mathematics	67.1	73.0	79.0	85.0	92.0	100.0	106.0	113.0	121.0	133.1
Chemistry	67.0	74.0	80.1	86.0	93.0	100.0	107.4	114.0	122.2	134.3
Geology and related	66.2	73.0	79.4	86.0	92.4	100.0	107.0	111.0	119.1	132.0
Physics	68.3	75.0	81.0	87.4	94.4	100.0	106.2	110.2	117.4	139.3
Sub-total physical sciences	68.0	74.0	80.0	86.1	93.0	100.0	107.0	112.3	120.1	134.0
Grand total	68.0	74.0	80.0	86.0	93.0	100.0	107.0	112.4	120.1	134.0

Doctoral Qualifications by Discipline

Table 22 shows doctoral qualifications for four selected years, by discipline and region. The Atlantic provinces and Quebec were substantially below the national average: in 1958-59, 30.4% and 35.3% of the full-time teachers in the Atlantic provinces and Quebec had Ph.D's compared with the national average of 41.7%. In 1973-74, the comparable figures were 44.1% for the Atlantic provinces, 53.9% for Quebec, and 56.8% nationally. The Western provinces always had a higher percentage of full-time faculty with doctorates in comparison to the national average.

Doctoral qualifications varied substantially among disciplines, reflecting the distinction between theoretical and applied fields. The 1973-74 average in the physical sciences was 82.0%, ranging from 78.2% in mathematics to 90.3% in chemistry. Percentages were low in applied disciplines like nursing (3.9%), architecture (7.7%), fine and applied arts (15.9%), law (16.5%), and dentistry (18.7%).

In some fields, the percentage of teachers with doctorates has increased considerably from previous years. For example, in 1958-59, 11.8% in commerce and business administration held doctoral qualifications; this had increased to 39.1% by 1973-74. Since a sizeable number of teachers are still completing their Ph.D's, the proportion in most disciplines is expected to continue to grow.

Table 22

Doctoral Qualifications of University Teachers by Discipline and by Region, Selected Years

	1958-59					1963-64				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
	percent									
Physical education	0.0	0.0	0.0	13.3	6.1	0.0	0.0	6.9	14.1	8.4
Education	18.8	14.0	25.0	36.1	27.0	27.8	13.9	13.3	38.7	27.5
Sub-total education	15.8	12.3	11.8	29.4	20.7	19.2	11.8	11.0	32.9	22.6
Music	0.0	0.0	41.7	15.4	15.2	0.0	9.1	26.7	15.2	13.2
Fine and applied arts	14.3	20.0	40.0	4.2	17.6	23.1	30.0	35.0	13.3	21.6
Sub-total fine arts	5.0	7.7	40.7	8.1	16.5	10.0	19.0	31.4	14.1	17.7
Classics	48.1	24.2	52.7	68.8	46.6	33.3	12.7	53.2	44.8	37.2
History	19.2	42.9	70.7	69.0	55.3	28.9	28.6	60.9	60.8	49.2
Library and records science	0.0	0.0	0.0	0.0	0.0	50.0	0.0	12.5	40.0	16.0
Mass media studies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
English	38.8	19.2	50.0	41.2	40.3	28.9	25.9	49.7	36.5	37.9
French	12.1	11.6	55.2	48.8	34.9	14.6	19.4	47.8	34.2	31.7
German	66.7	25.0	84.2	93.8	80.0	30.8	60.0	57.1	66.7	55.7
Spanish	50.0	0.0	16.7	25.0	20.0	14.3	16.7	42.9	37.5	28.6
Other modern languages	54.5	20.8	45.0	71.4	41.5	15.4	31.6	53.3	43.9	41.8
Philosophy	50.0	52.2	60.6	52.6	55.2	36.8	54.1	59.1	42.5	52.5
Religious studies	16.7	43.6	46.8	25.0	41.0	28.6	37.3	54.3	16.7	43.4
Sub-total humanities	33.8	32.0	54.1	52.5	44.9	27.3	30.9	53.1	42.3	41.4
Anthropology	0.0	0.0	50.0	100.0	58.3	50.0	44.4	54.5	87.5	60.0
Area studies	0.0	33.3	50.0	50.0	38.5	0.0	55.6	38.7	34.8	38.5
Commerce, business administration	0.0	10.5	16.3	11.4	11.8	4.0	14.3	28.4	11.9	17.1
Economics	25.0	48.7	47.7	56.3	47.4	37.5	32.3	43.0	60.0	44.4
Geography	0.0	46.7	60.9	46.2	51.9	66.7	30.3	53.6	54.8	48.5
Law	10.0	18.2	21.4	12.5	17.1	8.3	21.1	20.0	14.3	18.0
Political science	20.0	33.3	54.5	50.0	45.5	41.7	28.0	61.9	54.1	50.0
Psychology	40.0	65.4	61.2	63.6	60.7	64.0	62.5	75.3	67.9	69.8
Social work	0.0	21.7	11.8	6.7	14.5	0.0	21.1	21.7	2.9	14.6
Sociology	12.5	50.0	25.0	62.5	40.0	18.8	51.7	51.4	67.9	50.9
Sub-total social sciences	18.5	36.2	41.1	39.1	36.9	32.6	32.4	46.6	44.3	41.2
Agriculture	0.0	65.4	38.4	68.7	53.3	0.0	61.1	53.4	74.3	64.7
Biology	63.6	56.3	48.4	81.3	59.4	65.7	50.7	71.8	78.4	65.4
Botany	100.0	78.6	78.1	87.5	81.0	100.0	69.2	82.1	83.9	81.4
Household science and related	0.0	6.7	3.8	3.2	3.6	0.0	8.3	8.3	11.4	8.7
Veterinary medicine and science	0.0	0.0	22.2	0.0	20.4	0.0	0.0	18.8	0.0	17.6
Zoology	40.0	52.1	63.5	71.4	61.6	25.0	57.1	63.9	66.7	61.6
Sub-total biological science	41.2	52.9	45.0	61.3	51.0	47.6	51.4	54.8	65.5	57.1
Architecture	0.0	0.0	0.0	4.3	2.1	0.0	0.0	0.0	12.9	6.0
Chemical engineering	40.0	50.0	62.5	90.0	63.8	70.0	55.6	73.3	71.4	70.5
Civil engineering	22.2	16.0	18.2	11.8	14.8	15.8	21.6	30.5	17.2	22.7
Electrical engineering	0.0	25.0	32.3	17.9	21.9	10.0	26.5	36.1	25.0	28.2
Forestry	14.3	20.0	12.5	75.0	32.1	0.0	40.0	9.1	55.6	25.0
Mechanical engineering	0.0	8.1	13.8	15.6	10.6	0.0	18.9	35.6	24.5	24.3
Mining engineering	33.3	33.3	46.7	47.6	42.6	80.0	56.5	63.2	53.6	58.7
Sub-total applied sciences	10.1	19.1	23.5	22.7	20.8	15.3	27.1	37.7	27.1	29.9
Dentistry	0.0	0.0	14.3	14.3	7.9	12.5	5.0	11.1	18.2	12.7
Medicine	27.3	30.3	26.8	24.2	26.9	23.1	29.9	30.9	29.6	29.7
Nursing	0.0	0.0	3.0	0.0	1.6	0.0	0.0	2.3	2.9	2.0
Pharmacy	0.0	60.0	66.7	45.0	51.6	40.0	56.3	88.9	55.2	59.3
Sub-total health occupations	22.2	25.2	22.0	23.4	23.3	18.0	27.6	26.1	27.4	26.4
Mathematics	21.4	29.6	74.7	63.5	48.9	25.0	29.4	62.7	57.9	47.3
Chemistry	78.9	64.0	79.6	85.5	76.7	78.0	68.0	85.7	87.3	81.0
Geology and related	66.7	68.4	75.0	84.0	74.5	73.1	80.8	82.2	82.1	80.0
Physics	48.4	50.9	78.0	84.1	69.8	58.7	39.4	79.9	78.1	67.8
Sub-total physical sciences	49.6	47.4	77.3	78.4	65.4	56.2	46.6	76.4	75.7	66.1
Grand total	30.4	35.3	46.4	46.2	41.7	32.7	34.4	50.2	46.6	43.4

Table 22 (con't)

Doctoral Qualifications of University Teachers by Discipline and by Region, Selected Years

	1968-69					1973-74				
	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
	percent									
Physical education	8.5	14.6	8.2	14.5	11.1	19.6	22.3	36.3	27.9	29.3
Education	28.1	31.1	31.9	39.6	35.3	32.9	34.1	36.3	58.4	43.5
Sub-total education	20.3	28.1	23.3	34.6	29.9	29.4	32.0	36.3	52.4	40.1
Musical	12.1	18.4	20.8	12.4	15.5	14.3	16.5	26.7	25.4	22.8
Fine and applied arts	9.5	22.6	28.7	17.4	21.0	5.9	8.2	25.8	13.9	15.9
Sub-total fine arts	11.1	20.6	25.7	15.4	18.6	9.4	11.3	26.2	18.7	18.7
Classics	35.1	50.8	49.6	46.0	47.3	51.6	58.1	67.4	55.8	62.0
History	37.1	45.2	61.9	56.9	54.3	50.0	56.9	73.9	75.6	63.0
Library and records science	0.0	30.8	3.1	13.3	11.3	33.3	18.8	26.5	17.6	23.9
Mass media studies	0.0	0.0	0.0	0.0	0.0	0.0	24.0	15.4	13.3	17.7
English	32.5	31.7	48.7	45.0	42.9	47.0	60.3	63.5	63.7	60.7
French	14.5	31.2	39.4	39.5	33.2	22.0	46.4	52.8	61.1	47.8
German	33.3	93.3	50.7	48.6	51.7	53.3	59.3	52.0	65.2	52.3
Spanish	25.0	40.0	41.7	16.7	34.5	33.3	45.7	51.8	58.4	49.9
Other modern languages	22.2	42.4	45.1	43.7	43.1	19.4	78.8	69.8	63.2	67.0
Philosophy	28.4	48.8	55.6	44.1	48.5	45.7	55.7	65.8	50.8	60.1
Religious studies	33.3	45.0	61.5	45.5	49.8	58.2	55.7	62.0	63.3	58.9
Sub-total humanities	29.3	41.1	49.5	45.7	44.2	42.5	56.9	62.0	63.3	58.9
Anthropology	33.3	73.3	45.5	56.1	54.1	45.5	56.5	63.7	66.4	61.8
Area studies	0.0	90.0	40.0	38.9	42.3	0.0	77.6	45.2	57.6	62.8
Commerce, business administration	10.8	19.8	34.8	26.9	25.6	16.8	27.4	51.5	49.3	39.1
Economics	34.3	50.0	51.7	59.0	52.0	47.8	50.0	69.2	71.5	63.6
Geography	11.1	46.7	55.4	61.7	54.3	45.2	52.2	71.5	73.3	66.7
Law	3.6	28.9	9.4	14.3	15.5	7.1	29.1	12.0	10.4	16.5
Political science	28.6	40.4	47.9	55.2	46.4	38.3	59.3	62.5	69.2	58.6
Psychology	59.7	59.5	77.1	68.6	69.7	62.5	66.2	83.1	82.7	77.0
Social work	20.0	17.6	21.6	9.7	15.8	16.0	17.6	32.3	20.0	23.4
Sociology	34.8	37.8	50.8	56.3	47.3	41.7	39.8	61.8	66.7	55.7
Sub-total social sciences	30.2	40.0	49.2	50.5	45.9	39.3	44.4	61.9	61.0	55.4
Agriculture	100.0	62.7	60.7	82.0	70.3	0.0	73.2	72.4	87.3	79.8
Biology	67.0	69.0	82.5	80.4	76.1	73.4	76.3	90.1	88.0	83.1
Botany	100.0	100.0	83.3	84.8	85.8	92.0	88.9	90.4	87.9	89.2
Household science and related	14.3	19.0	25.7	13.6	17.5	19.2	34.4	51.4	35.9	38.9
Veterinary medicine and science	0.0	100.0	32.8	8.7	29.8	0.0	12.5	50.0	41.9	40.7
Zoology	41.2	70.1	71.0	75.6	71.2	81.8	84.0	89.1	91.2	89.2
Sub-total biological science	57.2	66.7	67.2	69.1	66.9	66.3	70.9	80.0	78.2	76.1
Architecture	0.0	11.4	5.1	11.6	8.9	0.0	7.6	10.3	6.7	7.7
Chemical engineering	92.3	77.1	81.1	92.9	83.1	81.3	86.7	85.8	92.3	87.2
Civil engineering	28.1	50.6	51.1	40.5	45.6	35.1	53.2	67.1	55.8	57.5
Electrical engineering	48.3	51.8	61.7	67.1	59.2	67.7	0.0	71.8	75.2	72.7
Forestry	15.4	60.0	33.3	68.8	46.3	21.4	0.0	40.6	72.7	50.6
Mechanical engineering	17.4	37.0	62.2	62.5	52.0	34.6	47.4	75.8	74.4	63.6
Mining engineering	66.7	71.4	79.3	70.4	72.8	50.0	78.8	72.2	60.0	72.6
Sub-total applied sciences	35.2	46.5	57.5	53.8	51.4	44.3	50.2	68.0	64.0	59.7
Dentistry	20.0	48.6	9.1	20.0	23.2	33.3	7.0	18.7	22.8	18.7
Medicine	22.2	48.4	23.3	29.0	33.7	38.5	69.6	32.2	36.1	42.7
Nursing	0.0	3.7	4.1	3.6	3.2	5.9	2.9	3.3	4.1	3.9
Pharmacy	87.5	83.3	84.2	68.1	76.9	66.7	91.4	88.2	74.0	79.6
Sub-total health occupations	18.4	46.0	20.9	27.3	30.5	32.4	60.2	29.2	33.7	38.2
Mathematics	29.6	43.6	72.5	72.2	60.5	54.7	43.9	65.9	64.3	70.7
Chemistry	77.8	80.8	89.2	89.3	85.9	83.1	88.4	93.8	91.4	90.3
Geology and related	72.7	94.3	94.6	83.8	87.3	79.1	76.1	91.0	94.7	86.9
Physics	60.6	70.9	87.2	90.0	81.2	71.4	81.1	90.4	92.8	86.6
Sub-total physical sciences	57.9	65.0	83.1	83.3	75.9	69.0	73.7	87.7	87.8	82.6
Grand total	35.9	46.9	52.8	51.6	49.4	44.1	53.9	59.6	60.3	56.6

